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FORTY-FIRST YEAR OF PUBLICATION

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Continuing our discussion of educational measurement, the November issue will feature articles on the interpretation and use of test results.

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EDITORIAL

It's a matter of gender. Both observation and cold statistics report that there are more men in the elementary school principalship than there were 30, 20, or even 10 years ago.

The reasons for this change are far-reaching. For one thing, the elementary school is gradually becoming an acceptable province for the male. Teachers and leaders of young children are now thought of less as mother substitutes (necessarily female!) and more as professionally skilled educators. Salaries have been improving, making it possible to support a family on a principal's income. And, finally, the nature of the job has been changing, becoming more attractive to men.

These developments reflect the kind of progress for which elementary school principals have long struggled. But in some quarters, they have also produced a number of fallacious notions we should guard against.

We should not, for example, be misled into thinking that higher salaries are in order because there are more principals today who must support a family. Salaries have improved—and should continue to do so—because of job requirements and job performance.

We should not unthinkingly accept the longstanding cultural norm that men, by virtue of being men, are better qualified for positions of leadership. We should not meekly go along with school boards who make masculinity a *sub rosa* prerequisite for the principalship. In filling certain types of jobs, gender may be a significant consideration. We haven't noticed many female deans of men lately! But to our knowledge, no one has proven that either a man or a woman is necessarily a better principal. (If anyone's searching frantically for a dissertation topic, he might investigate.)

Equally important, we should not become unduly emotional about how many men and how many women are elementary school principals. Let's not find groups of women lamenting the number of young men "taking over" the principalship. Let's not find groups of men counting heads to see if this year they can get a man—anyone so long as he's male—elected president of the local association. We should all be concerned with less irrational, less superficial qualifications for professional leadership.

It really isn't a matter of gender.

The Editor

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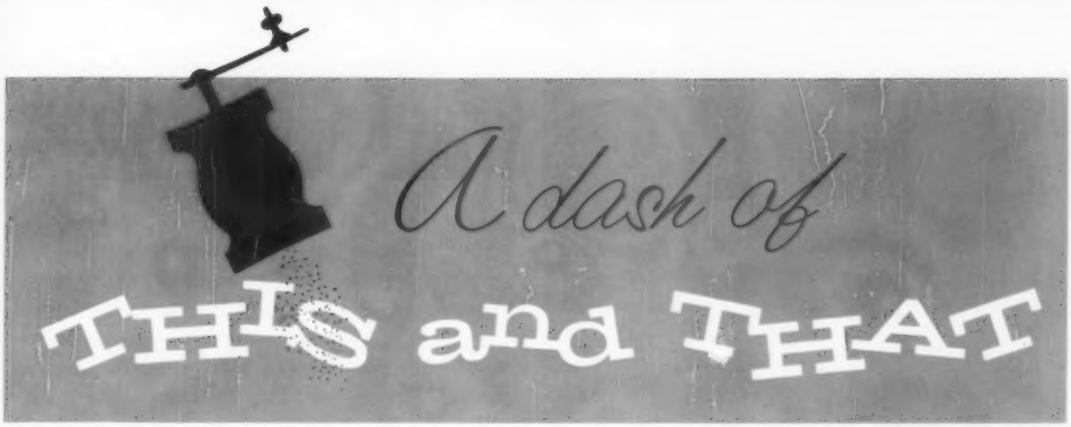


A VEXING SITUATION—A stuffy classroom—a broken-down desk—a chair that squeaks—fountains with no running water—blackboards and no chalk—windows with no screens—these are not critical situations, but they tend to baffle the systematic principal.

If you're concerned with these problems, write for the bulletin *Administering the Custodial Program,* OE-21005, which is available for 40 cents from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

SHARE DON'T SCARE—As a child of six or seven dons his Halloween costume, resembling a witch or goblin, he'll be thinking about all those pennies he'll be collecting for the needy children in other parts of the world instead of rubbing soap over the neighbor's window or coloring a screen door with crayons.

Yes, the United Nation's Children's Fund, which began in 1950, has real meaning! It has become a Halloween to share rather than to scare.

Principals, teachers, and parents everywhere can keep this fine American tradition alive by reminding the youngsters each Halloween to prepare milk cartons bearing the UNICEF label for their Trick or Treat collection.

WAKE UP TO PEAK-UP WEEK—Dogs, tin cans, lobsters—you name it, and there's sure to be a week set aside for paying homage. Now we've discovered another super-duper special week on the calendar—Peak-Up Week. Just in case this is a little obscure in meaning (we can't imagine why!), from September 10 to 16 we're all supposed to meditate about the importance of eating a good breakfast, preferably one of fruit, cereal, bread, butter, and milk.

Peak-Up Week is especially significant to teachers and principals. We quote: "Better breakfasts mean better grades and better attitudes." And all this time we thought it was so complicated!

GEAR YOUR SCHOOL FOR THE FUTURE—As public schools face the possibility of bringing new instructional tools into the classroom, school building construction warrants a new look.

For an excellent preview into school building construction—classroom facilities, auditorium, office and storage space, conference areas, and laboratories—there's a new manual called *Planning Schools for New Media.*

Copies of the guide may be obtained for $1 from the Division of Education, Portland State College, Portland, Oregon.

A POLL OF BRIGHT GIRLS—According to the New York State Education Department, more bright girls are leaving school to marry than for any other reason. A survey shows 78 percent of bright girls and only 43 percent of the less gifted leave for matrimony.

MORSELS ON SCHOOLS AND DELINQUENCY—How do educators feel about the role of the school in the prevention and control of juvenile delinquency?

In the May issue of the *California Elementary Administrator,* William C. Kvaraceus of Boston University said, "The school is not a hospital; it is not a clinic; it is not a community convenience for disturbed or disturbing children and youth; nor is it an adolescent ghetto. The unique and special role of the school is to be found in its teaching-learning function."

He remarked there is no one thing that the school, acting alone, can do to make any great difference in the delinquency picture. In other words, the responsibility of the school to the delinquent doesn't differ from its responsibility to every and any learner or non-learner.

OPPORTUNITY KNOCKS AGAIN—American Education Week will be observed November 5-11. This is another opportunity to visit local schools and watch education on the job.

Parents and citizens will be able to observe teaching methods in action; see children participate in the classroom; recognize the educational needs of the community; view the facilities of the school; and become acquainted with the system's programs for getting and keeping the best teachers.

AEW's theme for 1961 will be "Your Schools: Time for a Progress Report."

Those interested in folders and brochures keyed to the November observance may send inquiries to the American Education Week, 1201 Sixteenth St., N. W., Washington 6, D. C.

MAP STUDY AND ITS REVELATIONS—In teaching geography, a teacher is confronted with all sorts of names and places as she begins to show pupils the various regions of the country. The pupil usually has difficulty remembering the name of a certain town in a state and its location. It's going to be even more puzzling to the teacher and the pupil when they learn that map-making firms are having to create more "overtime" for map makers because the United States is such a "changing" country.

"For instance, North Hampton suddenly decides it's really Northampton, or the government decides to build a dam right where a village has been thriving all of these years, and we have to move the village out of the water," Caleb D. Hammond, president of C. S. Hammond & Company, points out.

Another interesting phase of map study concerns the derivation of names. Among the unusual ones are:

Chilly, Idaho—A meeting in Idaho to choose a name for the new community was unsuccessful until a latecomer entered and announced it was chilly outside. The meeting came to a close and the town was named.

Cowpens, South Carolina—In early days, cattlemen used the area for cowpens and the name stuck.

OUR PRESIDENT

MARTIN C. TATE, a native of Arizona, has assumed this year's role as President of the Department of the Elementary School Principals, NEA. His vast experience as an elementary school principal and leader in professional association activities provides valuable background for the position.

Some 23 years, Mr. Tate has been active in this field. After 10 years as principal of the school in Safford, Arizona, where he had also been an elementary school pupil and a teacher, he became a principal in Phoenix, where he is at present.

Within the national Department, Martin Tate has served as a Member-at-Large on the Executive Committee before he was chosen President-Elect. At last year's Annual Meeting in Atlantic City, he gave the invocation at the first general session; presided at one of the assemblies; and was a consultant for the educational consultant centers. He has also served the Department as state representative from Arizona.

As a leader in professional associations, Mr. Tate has been President of the Arizona Education Association, Phoenix Elementary Administrators Association, Arizona Association of Elementary School Principals, and Arizona Association of School Administrators. Although the latter organization includes elementary and secondary principals and city and county superintendents, Mr. Tate is the only elementary school principal to have become its president.

Besides these duties, he has been a member of the Arizona Education Association's Executive Committee for six years, serving in the capacity of president, vice-president, and delegate-at-large.

In addition, our new President has worked actively on many professional matters in the state, such as setting up a state-wide study of Arizona's certification standards, a project which has been effective in upgrading Arizona's certification requirements. He is also a member of the Arizona Education Association's Legislative Committee.

A married man with three children, he is vitally interested in church and community activities.

Mr. Tate is a graduate of Arizona State University and has his M.A. from Arizona State College, Flagstaff, Arizona.

PRESIDENT'S MESSAGE

Martin C. Tate

I SHALL never forget the year 1939: the scene, the not-too-well-equipped office of a newly appointed principal of a school of over 800 students—no secretary—no special services except a school nurse. I was to perform the duties of principal and teach five of the eight 45-minute periods each day.

It was during this same beginning year that a fellow principal, more experienced than I, walked into my office and, in the course of the conversation that followed, suggested that I should seriously consider joining the national professional organization for elementary principals. In his opinion, this Department of the NEA had a future. He reassured me that being a principal was very important and that the time would come when one who held this position would exert more influence than *we* were doing in this particular depression year.

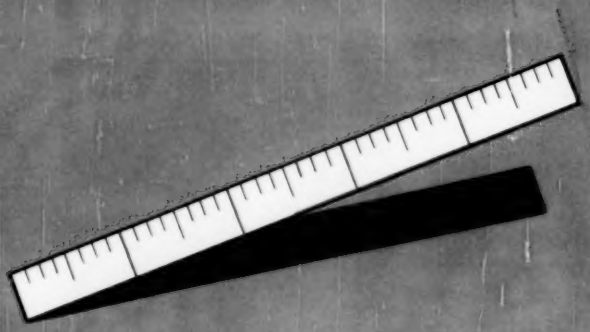
Was this principal a prophet? Did he have visionary tendencies? Perhaps—but I really feel now that earlier than many of us, he was able to recognize more of the needs of the schools and communities in a growing society. I think, too, as I recall bits of our discussion, that he sensed the real need for leadership in the field of elementary education.

I thank him for pointing out to me that the Department of Elementary School Principals, NEA, was in an excellent position to give leadership and direction to elementary education.

After all, when we get to the crux of things, there is only one real problem in the world. It doesn't matter very much whether our goal is educating for a democracy, building a business, or running a nation, the problem is always the same—leadership—the process of helping others. Never before has a generation been confronted with this problem in such a degree of magnitude and consequence. On the other hand, never have so many been so prepared, so desirous, and so cooperative in meeting the challenge of its problems. Our Department will serve its purpose only as it serves its members; as it gives its rays of light to aid the causes we have espoused. Probably the best single way to improve our leadership is to be aware of our needs and the needs of today's society. We must work together as we strive to become better principals for our schools.

Someone has said that the greatest invention of all times was when an obscure Greek at Plataea, about 2500 years ago, perfected the process of marching in step. When it was found that the efforts of a large group of people having different motives and different personalities could be organized and coordinated to function as one, that day civilization began.

I am proud to be a part of an organization that looks with dignity on its responsibilities and opportunities. "Men in step" is one of the greatest devices for success. Let us march together.



Educational Measurement

a broad perspective

RALPH W. TYLER

EDUCATIONAL measurement is important for the elementary school principal not as an end in itself but as one of the means by which he exercises his responsibility for instructional leadership. In the selection and use of educational measures, the goals of elementary school instruction are clarified and information is obtained which is helpful in teaching and counseling, and in curriculum development, supervision, and administration. Measurement is not a method of rating teachers but it is a process of great value for teachers.

Educational measurement is an effort to refine and make more objective and precise our observations of pupils' behavior as they are engaged in learning and in using what they have learned. Measurement is not a substitute for informal observations by the school staff but it is an aid in interpreting these observations. It does not take the place of thinking, planning, and working creatively but it serves to appraise the results of curriculum planning and instructional activities. It is not the only means of evaluation but it is an essential part of it.

Ralph W. Tyler is Director, Center for Advanced Study in the Behavioral Sciences, Stanford, California.

Uses of Educational Measurement

The many uses of educational measurement in the elementary school can be easily illustrated.

Assessing subject achievement by grade: Perhaps the most common use, but certainly not the most significant, is in assessing the level of pupil achievement in the school subjects, grade by grade. One or more standardized tests in such fields as reading and arithmetic are given at several grade levels. Using the results, it is possible to: 1) estimate the amount of learning in these fields during the time since the same pupils were tested previously; 2) compare the indicated amount of learning (that is, the change in achievement since the previous measurement) with that indicated in previous years—this is one index of improvement in the school's educational accomplishments; and 3) compare the mean and the variability of the pupils' achievement in these fields with the mean and variability of similar schools in the city, state, region, or nation.

Providing data for individual guidance: A second common use of educational measurement is to provide data for individual guidance and counseling. A pupil's scores on achievement tests, intelligence tests, tests of special aptitudes, and tests of interests, social behavior, and personality supplement teacher and parent observations in identifying talents and abilities, problems and difficulties. This data is also helpful in parent interviews and reports.

Diagnosing learning difficulties: Educational measurement aids teachers in identifying the strong and weak points in a class' work. For example, through the use of a test on reading and interpreting narrative materials, the teacher may recognize more clearly the fact that a class is making good progress in getting the main plots of stories but is not growing in ability to interpret their implications. A test in arithmetic may show that a class is making good progress in problem

solving but not in speed and accuracy of computation. Finding these areas of difficulty enables the teacher to focus his instructional efforts more efficiently.

Similarly, measurement can be helpful in identifying the strengths and weaknesses in achievement of individual pupils. As the teacher and pupil find the respects in which his achievement is less than adequate, individual learning efforts can be directed more efficiently.

In diagnosing learning difficulties of a class or an individual pupil, more than educational achievement should be measured. The outcome of instruction is influenced by the learner's personal characteristics as well as by his achievement level. Among the significant characteristics, in addition to age, sex, and mental test scores, are social class, educational and occupational goals, cultural level of the home, parents' attitudes towards education, interests, types of motivation, social acceptance by peers, physical growth, and work experience. A number of these characteristics can be measured. The results are useful in understanding the extent and limitations of achievement by a class or individual pupil and in working out an instructional plan to improve learning.

Evaluating new methods and materials: Most elementary schools, concerned with improving their effectiveness, devise and try out new teaching methods and materials. Some of these new things may turn out in practice to be a distinct improvement; others may not. In determining the value of new devices, educational measurement is important. One's subjective judgment about how well something is working is greatly affected by his habits, expectations, and moods. It is necessary to supplement personal judgments with objective comparisons of educational results. There are several useful comparisons. One may compare the results obtained in using the new device with previous educational outcomes with the same class, with outcomes obtained in control groups, or with outcomes commonly obtained by classes similar to the ones in which the new device is used. Hence, educational measurement is a necessary tool in improving methods and materials.

Contributing to in-service education: One of the most important values of educational measurement for the elementary school principal is in its contribution to the continued in-service education of the school staff. It assists in developing the school staff in two ways: 1) by calling for clarity and concreteness in discussing, planning, and appraising educational programs; and 2) by focusing attention on pupil learning rather than on teaching procedures per se.

Many discussions of educational objectives are expressed so vaguely that they do not serve to guide the selection of learning experiences. Saying that the school is to teach thinking, develop character, and enable pupils to master the tools of learning will not get to the level of concreteness needed to focus effort and guide instruction. In planning a program of educational measurement, the staff must go beyond these general phrases and define the goals clearly in terms of the behavior the school seeks to help its pupils acquire. The staff must be able to state the kinds of thinking, feeling, and acting the school expects to help children develop. For an elementary school, this involves an actual listing, for both the primary and intermediate grades, of the things the staff expects pupils to understand, the skills it expects them to acquire, the interests it hopes they will develop, the values it hopes they will appreciate, and the habits it wants them to develop. This listing is basic to planning a measurement program. One cannot select appropriate measures until he knows what it is he wants to measure. Hence, planning a measurement program requires the staff to clarify its goals. The concrete results of this thinking are useful not only in selecting measures but also in planning the curriculum.

Planning a measurement program focuses attention upon what pupils are expected to learn; study of the results of measurement directs attention to what pupils have learned or have not learned and to pupil characteristics and learning conditions which may facilitate or interfere with learning. Thus, the pupils and their learning occupy the center of attention. This concern leads naturally to further observations, to additional study of pupil needs, motivations, habits, attitudes, and the like, and to a consideration of conditions which facilitate learning and of the ways in which the instructional program may increase learning. These are important subjects in the in-service education of the staff.

Public Pressure for Critical Appraisal

Although it can serve such important purposes, many elementary schools are not using educational

measurement and many others are utilizing it inadequately or inappropriately.

During the past few years, there has been more than a fivefold increase in the use of standard tests in American schools. But this increase has not been accompanied by a corresponding growth in the use of tests for the purposes mentioned above. The major influences in the current emphasis on testing have been those provisions of the National Defense Education Act which support the use of tests in educational guidance and, secondly, the public demand for evaluation of our educational efforts. The NDEA has been primarily an influence on the high schools in the use of tests, but the public demand for evaluation has affected the elementary schools fully as much as the secondary schools.

One of the reasons for the current limitations in utilizing educational measurement is the concern of many of us in the schools to defend our work against public criticism. Not since the great debates of a century ago on the development of the American system of public schools has there been so much general public interest in education. Local school boards, state legislatures, the Congress, and the public generally are deeply concerned with the quality of education. Seeking appraisals of the public schools, they find conflicting reports.

These increasing demands for critical evaluation must be met. But appraisal of the work of an elementary school is not a simple procedure. It requires consideration of the school's several objectives, of the educational backgrounds from which children come since there is a wide range in the extent to which the home contributes constructively to children's educational development, and of the quality and quantity of resources the community devotes to the school. While educational measurement is an important part of the appraisal process, its value depends upon proper use.

The present emphasis upon critical appraisal of American schools can be a good and powerful influence toward strengthening educational programs if the evaluation is adequate, constructive, and intelligently used. But it can also do great damage both within and without the school if the appraisal is inadequately conceived, poorly planned, and unwisely used. To serve most effectively, educational measurement needs to be planned and used as an integral part of the school's instructional program.

Shortcomings of Early Testing Movement

Another factor which contributes to the inadequate use of measurement in the elementary school is our earlier experience with group testing which reached its peak in the 1920's. This was called the "scientific movement" in education.

During this period, the products of learning were measured on tests which carefully reflected the content of teaching materials, but were not built on a systematic analysis of the educational values to which good schools and teachers were dedicated. In subjects like geography and history, pupils were tested on their recall of specific items appearing in commonly used textbooks. Yet thoughtful teachers of geography and history strongly believed that the most important values to be sought in teaching these subjects lay not in mere memorization but in perceiving relationships among things and events and in being able to interpret human activities through geographical and historical concepts and generalizations. As a result, they were unhappy about the "measurement movement" of the period because it did not base its appraisal upon a careful consideration of the educational values involved.

Reading tests were constructed on detailed analyses of vocabulary and of the percentages of pupils answering questions correctly, but without systematic examination of the major educational values sought in the teaching of reading. Most test items required only simple comprehension of reading passages or an unanalyzed mixture of pupil responses. Experienced teachers were certain that a number of values in addition to "plain sense comprehension" could be and often were achieved in teaching reading. Interpretation of varied types of reading materials involves much more than straightforward comprehension. Lifelong reading interests and sensitive responses to poetry are two illustrations of values which loom large in a reading program. These were minimally reflected in educational appraisals of the time.

The arithmetic tests were also inadequate in terms of the values sought by able teachers. They usually included only exercises in computation and verbal problems to be solved by computation. They, too, were based on a compilation of the exercises found in widely used textbooks, and

on an analysis of the percentages of pupils answering questions correctly. There was no direct effort to appraise such values as understanding arithmetic concepts and the ability to think in quantitative terms. Yet these values were considered of great importance by many competent teachers.

Because of these serious limitations, many educators became disillusioned with the tests of the period.

Defining Educational Objectives

The Eight-Year Study, which began in 1933, worked out a new and broader concept of educational measurement in connection with the program of evaluation. The Study used the term "evaluation" to accent the fact that it was seeking to appraise the educational values actually developing in a school program. The first step in the Study was to identify the educational objectives teachers were seeking in order to plan appraisals that would measure how well they were being attained.

To say that evaluation should begin with the educational objectives since its purpose is to appraise pupil progress toward each of these objectives is simple enough. But obtaining a list of clearly defined objectives is not easy.

Many teachers have not stated their objectives —in fact, some which they consider most important may not have been written down or even explicitly formulated in their own minds. Hence, the listing of objectives requires a great deal of thought and discussion. It should be guided by such questions as: "What are we trying to help students acquire in and through our reading program? Our social studies program? Our arithmetic program? Our arts program? What abilities, skills, knowledge, attitudes, interests, habits, and the like do students need in order to get the most out of reading? Out of social studies? Out of arithmetic? Out of music? Why are we using these materials or these procedures? Do they suggest certain results or objectives that we are or ought to be seeking?" These are simply different ways of reminding ourselves of possible objectives. Often several different questions are needed to stimulate teachers to reflect on their own experiences and purposes.

Once identified, objectives must be clearly defined. The objectives of education are to facilitate various kinds of desirable learning on the part of pupils. But learning is the acquisition by the pupil of ways of behaving—that is, ways of thinking, feeling, and acting which he has not previously followed. Thus, a child in the primary grades may develop a mode of attacking unfamiliar words which he has not previously used, or a sixth-grade child may acquire an interest in learning more about the peoples of Africa. To evaluate, we need to know what kinds of pupil behavior we are looking for. When we talk about comprehension as a reading objective, we should ask what kind of behavior is involved and with what kind of reading materials. Our objectives must be defined in terms of pupil behavior.

Skill and ability objectives are easier to define than objectives concerning interests and appreciations. Working over the years with teachers, we have found some fairly common agreements in defining many of these less tangible objectives. Interest in reading, for example, is often defined in terms of the following behavior: "The pupil likes to read. He gets satisfaction in reading. When he has free time, he often chooses voluntarily to spend time in reading." Usually, teachers are concerned that pupils become interested not only in reading but also in reading varied types of stories, articles, and books, and that the content of the reading they choose voluntarily show increased complexity and maturity as time goes on.

Such definitions of objectives in terms of behavior make it possible to plan appraisals based on the important educational objectives. This was a first significant phase in the development of the older measurement into a process more appropriate for educational evaluation.

Broader Definition of Educational Tests

Since the purpose of educational appraisal is to find out to what extent each of the important educational objectives is actually being realized, means for measuring actual pupil behavior are essential. This is a necessary check on hopes and fears, on expectations and doubts. Without real evidence of what pupils are learning, we tend to rely heavily on our own preconceptions, and our temperaments—optimistic, skeptical, or pessimistic as they may be—will largely color our conclusions. Empirical tests are necessary.

Some 25 years ago, the prevailing concept of an educational measurement was the administration

of a paper-and-pencil test, usually consisting of true-false or multiple-choice items. These devices could provide evidence of the amount of information the student could recall and indicate his ability to spell words, define terms, and make computations. They could also furnish some indication of his ability to comprehend reading passages. But they were not relevant to some other important objectives. They did not provide evidence of habits, attitudes, interests, appreciations, and a variety of problem-solving abilities.

As we sought to develop means for evaluation, it became clear that we must broaden the concept of an educational test. We now think of an educational test as a series of situations which call forth from the pupil the kind of behavior defined in the objective and permit a record to be made of the pupil's actual behavior. For example, a test of reading interpretations should consist of a series of situations in which the pupil is stimulated to read and to interpret what he is reading, and in which a record can be made of the pupil's interpretations.

This conception of an educational test makes possible the use of a variety of devices for measurement. In addition to paper-and-pencil exercises, such procedures as observations, interviews, questionnaires, samples of products made, and records obtained in other connections can serve as evaluation devices. To appraise habits, for example, observation may be employed or, under certain circumstances, questionnaires may be useful. To appraise appreciation of literature, interviews focused on the pupil's responses to his reading and his feelings and judgments are sometimes helpful. Although the realization that comprehensive educational measurement requires evidence about each of several important objectives made the task seem more difficult, the further recognition that a variety of appraisal methods could be used helped to encourage us.

Need To Measure Pupil Characteristics

The early notions of educational measurement drew heavily upon the natural sciences for their rationale. To determine the melting point of aluminum, any sample of pure aluminum would do. The results did not vary appreciably with the particular sample tested. Biological science, however, recognized the differences in genetic composition. The effect of limited rainfall on wheat is partly dependent on the genetic composition of the wheat. Similarly, the early experimenters in education quickly went beyond J. M. Rice's pioneer effort to find out whether different amounts of time devoted to spelling made any difference in the ability of children to spell. In his study, no attention was given to differences among the children taking spelling. But the influence of Terman, Thorndike, and others resulted in general recognition of differing "mental abilities" which had to be taken into account in studying the effects of differing teaching methods. By the beginning of the Eight-Year Study, educational appraisal often involved testing for mental ability and frequently the use of control groups similar in age and sex as well as in mental test scores.

The Eight-Year Study included a great diversity of boys and girls. As we began to appraise pupil learning and observe the effects of different procedures, materials, and teaching personalities, it became clear that the educational effects often were related to a number of pupil characteristics. A free reading program in the eighth grade which showed great influence on the quality of reading interests in one school seemed to have much less effect on the quality of interests in another school. Yet the appraisal of mental ability revealed no appreciable differences in the distribution of these scores. These findings led us to recognize the need to evaluate a variety of student characteristics if we were to understand and report the values of different kinds of educational experience. Instructional procedures and materials and principles of curriculum organization were often effective for students with certain characteristics and not for others.

Hence, the conception of educational measurement developed to include the measurement of characteristics of the learners. Some of these characteristics were mentioned earlier in this article. The appraisal of characteristics is similar to the appraisal of what students are learning. Except for categories like sex and age, each characteristic needs to be defined in terms of pupil behavior and a variety of test devices selected which call forth the desired behavior and provide opportunity for recording the pupil reactions.

Need To Assess Learning Conditions

When the Eight-Year Study began, it was commonly assumed that curricular plans, teaching

methods, and instructional materials were in themselves clearly defined factors which could be assessed in terms of their effectiveness in producing desired learning. Educational experiments had compared the "look-say" method of teaching beginning reading with the "syllabic analysis" method, the "systematic method" of teaching spelling with the "incidental method," the "incidental method" of teaching arithmetic with the "drill method," and so on. Often, several investigations of the same "methods" yielded quite different results.

In the Eight-Year Study, several schools explored such innovations as "pupil-teacher planning" and the "core curriculum." As we observed the development in different schools of what was thought to be the same innovation and talked with teachers about them, we realized that a phase like "pupil-teacher planning" assumes concrete meaning in terms of the way in which it is conceived, developed, and actually carried on by the teacher. The phrase is a stimulus for thought and planning. But this and similar terms are not precisely defined entities like a specific injection of penicillin. We sometimes found as much variability in results among classes which were purportedly using the same "method" as we found among classes which were using several different methods.

From such experiences, it was apparent that a comprehensive program of educational measurement should include an assessment of the *conditions* of learning if the results of the appraisal of *what* pupils were learning were to be adequately understood. The conditions of learning which should be assessed depend to some extent on those that appear to be critical for the educational program under study. Generally, an estimate of the following conditions of learning will give a very useful picture of the teaching methods, materials, and organization.

- Pupil motivation: What proportion of the pupils are interested in the work of the class? What proportion are deeply involved in the work?
- Recognition of need to learn new behavior: What proportion of the pupils recognize that they are facing new problems and are acquiring new understanding, new techniques, and new attitudes to deal with these problems effectively?
- Guidance of new behavior: What proportion of the pupils are obtaining needed guidance rather than being left to trial-and-error when they attempt new behavior?
- Availability of appropriate materials: To what extent are pupils provided with materials that give them the opportunity to practice the kind of behavior to be learned?
- Time for effective learning: What proportion of the pupils have time to carry on the behavior and practice it?
- Satisfaction from the desired behavior: What proportion of the pupils are deriving satisfaction from learning the desired behavior?
- Provision for sequential practice: To what extent do the learning experiences from day to day—and over longer periods—provide for sequential rather than repetitious practice of desired behavior?
- Pupil standards of performance: What sort of standards of performance do the pupils have? To what extent does each pupil have a standard which is high for him, but attainable?
- Means for the pupil to judge his performance: What proportion of the pupils have ways which they use to judge the quality of their own learning? Are the methods they use valid and practical?

Conditions for learning such as the foregoing provide a more useful way of describing teaching procedures than to describe them in terms of "direct" or "incidental" methods or in terms of "teacher-dominated" or "pupil-directed" methods. Creative teachers can facilitate learning by a variety of procedures. But whatever methods they use or however they stimulate reactions, teachers can more clearly understand their effectiveness in terms of the extent to which the conditions of learning are provided.

In the light of the history of the past quarter century, educational measurement is seen as a growing concept. It has developed into a process involving educational objectives, educational tests, the appraisal of the characteristics of the learner, and the assessment of learning conditions. Beginning as a procedure used only by educational and psychological research workers, it has become a process of great value to the elementary school principal in discharging his responsibilities for educational leadership.

What is a GOOD MEASUREMENT program?

RODNEY TILLMAN

THERE is no single clearly defined measurement program which can be used effectively in all elementary schools. The pace and level of instruction, the unique goals of individual schools, differences in curriculum design, and other variables make a single measurement program unworkable. Each school system—indeed, each school—must develop the procedures which will best serve its pupils.

Apart from this necessary diversity, however, there are a number of elements common to all good measurement programs. In this article, we shall identify some of these elements.

Consistent with School Goals

A good measurement program is consistent with the goals of the elementary school. A measurement program cannot be judged "good" or "not so good" apart from its fundamental purpose—determining the extent to which the instructional program is helping children reach the objectives of the elementary school. The school staff must define its goals, plan implementing activities, and devise techniques for measuring progress.

When school goals include statements relative to accepting responsibility, developing constructive attitudes about oneself and others, developing healthy personalities, and other important traits, as well as statements regarding achievement in subject-matter areas, then the program must include many different kinds of measuring instruments. Many of these instruments will be standardized, but others will need to be developed to fit the specific problems of the individual school. The instruments required will be determined by the scope of the measurement program which, in turn, will be determined by the objectives of the school.

Planned in Terms of Local Needs

A good measurement program is planned to fit local needs. It should be geared to the requirements of the individual school and of the school system. And it should be planned to facilitate sharing of information.

A good measurement program is developed in terms of the unique characteristics of the local school and school system. For example, stability or lack of stability in the school population and the community's educational priorities will influence the measurement program.

Measurement in the elementary school is most effective when it is part of a system-wide program. The interpretation of test results from one level may be affected by comparison with data collected at other levels. For example, the interpretations placed on relative scores in arithmetic fundamentals and arithmetic reasoning in the primary grades may change as one views the same two areas in the upper grades.

Time should be made available for teachers to share the data assembled on specific pupils with others who might be of assistance in interpreting the findings. It is important to plan for sharing between teachers within the school, and also with junior and senior high school teachers of former pupils.

Understood by Teachers

A measurement program, to be good, must be understood by teachers. Each teacher should be familiar with the scope and content of the school's measurement program. With a knowledge of the total program, teachers are able to put their own responsiblities for testing in broad perspective and are able to use tests more effectively as a tool for instructional improvement.

Basic to an understanding of the total measurement program is a recognition of the role of standardized tests. It is essential that teachers

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be aware that standardized tests are only one part of a good measurement program. Too much stress on standardized instruments often makes it difficult to refrain from teaching the test. Perhaps more important, a good measurement program is a flexible, varied program. No amount of standardized testing can supplant the need for locally developed and informal measurement techniques.

Teachers should understand the strengths and weaknesses of the standardized instruments used in the school, the differences between various instruments, and the relationship between each of the instruments and the educational objectives it measures. They should be familiar with the school's procedures for using standardized tests and know which tests should be given when.

In addition to the regularly scheduled standardized tests, any good measurement program provides for retesting. It is important that teachers be skilled in identifying pupils who need retesting and that they understand the procedures to follow in seeing it is done.

Teachers should also be informed about the school's policies on the use of test results with parents and the community in general. They should understand why test scores should be disseminated only to those who can use them effectively and constructively, and they should recognize the fallacy of releasing test results—both individual and group—to the mass media.

Often, in order to provide for unique needs and differing school populations, measurement procedures vary from school to school within a system. When measurement programs are varied to fit individual school situations, all of the system's professional personnel should be provided with a careful description of the differing procedures and with a statement explaining the reasons for the variation. This is important, in part, because any departure from "normal" procedures by an individual school is certain to be discussed throughout the system by the staff and by members of the community. Accurate information helps to reduce anxieties and misunderstandings which may result from discussion based on partial or inaccurate information.

Both elementary school principals and central office personnel have a responsibility for seeing that teachers and other professional staff members are informed about the measurement program and are helped to raise their competencies in the use of measurement procedures. A good measurement program makes provision for in-service activities which will help each teacher participate successfully in the total program. Through such activities, the individual teacher is helped to assess the strengths and weaknesses of his own instruction.

Provides Up-to-date, Usable Data

A good measurement program provides the teacher with up-to-date and usable data. It is designed to collect the type of information which will be most helpful to the teacher in improving instruction.

The elementary school teacher works with the total class group, with subgroups of the class, and with individuals. Therefore, in collecting data, it is important to use procedures which give information on both the class group and individual pupils. Instruments vary in their suitability for each of these purposes; some are most valuable when they provide composite scores for the total class, while others are especially useful in obtaining data about individual pupils.

Good measurement programs provide information at a time when it is possible to work effectively with the data. Scheduled standardized tests should be administered early in the school year and results made available soon after the testing. Teachers may then identify the weaknesses of both the total class and individuals and plan ways of helping to correct them. When the tests are given near the end of the school year, their use tends to be limited to the help they can provide for individual guidance. Opportunities to utilize information the tests yield about the class as a group will be limited since class groups usually change from one year to the next.

Since many types of information needed by the teacher are not available from the standardized testing program, the teacher should gather data from many different sources. Among the tools he may employ are:

- Health records
- Conferences
- Projective techniques
- Sociometric devices
- Interest inventories
- Anecdotal inventories
- Check lists to fit the local school.

These and other instruments enable the teacher to collect the facts necessary for making intelligent decisions about total class activities and the work of individual pupils.

Involves Learners, Parents, and Teachers

A good measurement program involves learners, parents, and teachers. With assistance from his parents and teacher, the learner should participate in identifying his own objectives. He should be made responsible for collecting some of the evidence which will help him and his teacher in measuring his growth toward each of these objectives. In using this procedure, elementary school pupils generally set very reasonable objectives for themselves. It is the teacher's responsibility to see that appropriate ways for determining progress are identified. He should also check on the follow-through of plans so both he and the pupil will have sufficient evidence to determine whether or not there has been growth.

In addition to providing useful information about children, a good measurement program helps each professional staff member become more competent in fulfilling his responsibilities. Job descriptions are useful since they make it possible for each member of the staff to know what is expected of him. A variety of measures which will enable teachers to determine their effectiveness should be available. Some of the instruments will be self-administered; many times these are believed to be the most effective. Other instruments will involve judgments on the part of professional co-workers.

Offers Assistance to the Local School

A good measurement program provides assistance to the local school. There are several types of assistance which should be available to strengthen measurement programs in the individual school.

The need for in-service activities has already been explored. In addition to organizing and directing in-service programs, central staff members should assist in both the construction of measurement instruments and the interpretation of data. In most large systems, some central office staff member is designated to assume this responsibility and elementary school teachers and principals consider him a resource person to be called upon as needed. Most appropriate usage is made of his services when there is a clearly stated description of his function. In larger systems, it is often necessary to have several supporting assistants or co-workers.

In addition to his responsibilities for consulting with faculty groups and providing in-service activities, the central office staff member has other duties which are quite essential to a successful measurement program. These duties include such activities as: stimulation of systematic curriculum study at the local school level, assistance in reporting results of a study, coordination of studies within the system, examination of proposals for studies to be conducted in the system, and provisions for technical assistance needed to conduct a study of the measurement program and interpret it to the community.

When an individual school needs assistance which is unavailable from the central office staff, funds should be provided with which to secure outside consultants. Most frequently, these consultants are employed to develop and interpret instruments for securing data in areas which have previously been subjected to little, if any, measurement. As schools become more systematic in determining pupil growth in such areas as self-discipline, responsibility, citizenship, international understanding, and understanding of self, the need for outside consultants increases. During the years ahead, we may expect more and more public school systems to maintain a long-term relationship with consultants. Since a majority of these consultants will be associated with colleges or universities, this type of cooperative undertaking should strengthen the instructional program at all levels.

Automation also offers the possibility of assistance to the individual school's measurement program. Many large school systems are now utilizing automatic test scoring equipment. Other systems, both large and small, are making use of the services of some agency or institution to assist in scoring and tabulating information. As a result, the time-consuming process of scoring is being removed, and the teacher is frequently being provided with additional information which might not have been obtained otherwise. Other mechanical aids—for example, tape recorders and cameras—are also helpful in gathering information for measurement purposes.

Outside organizations, such as universities and

educational agencies, have a place in the measurement program. Many school systems are receiving substantial assistance in the study of their educational problems through cooperative efforts with outside groups. Research studies undertaken by graduate students are providing valuable data in many situations. Central office staff members can encourage local school faculties to identify specific problem areas on which they would like to have cooperative studies. These concerns may then be made known to interested individuals and groups.

Keeps Up with the Times

A good measurement program changes. Developing and maintaining a good measurement program is a continuing responsibility. At the present time, the increased interest in this topic is resulting in the development of many new instruments. Along with this interest, there is also a need to modify the program as school goals are changed.

The responsibility for continuously examining the system's program must be assumed by some person or group. There is usually more acceptance of change if it comes as a result of group decision. Some systems are finding standing committees composed of representatives from each school helpful in making improvements in their program. When the size of the school system makes such a committee too large to function effectively, the representatives often select a subgroup to serve as a steering committee. The committee's duties include:

- Continuous study of new measurement instruments
- Continuous examination of standardized tests in relation to the current courses of study so the most appropriate tests will be selected for the testing program
- Determination of areas in need of measurement
- Reporting the work of the committee to all professional staff members through committee representatives.

Needed—More Good Programs

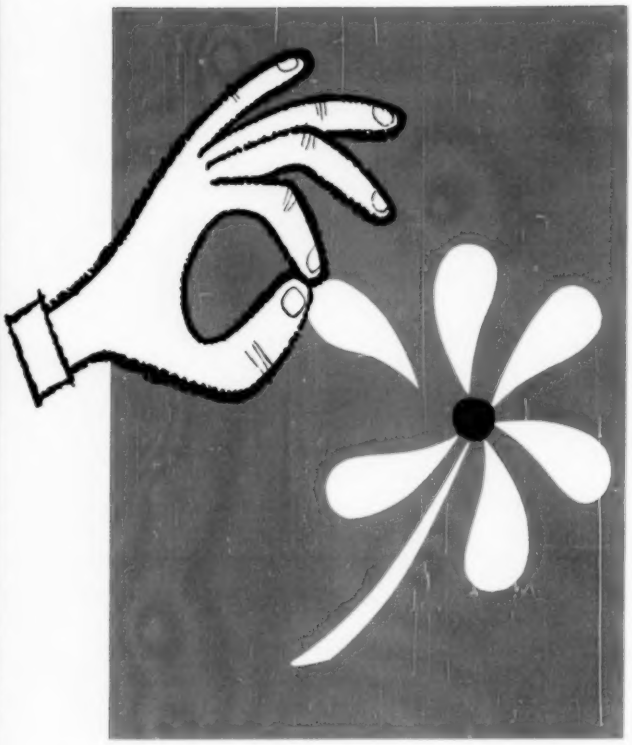
In most educational advances, the "good" practices of previous years have developed into the accepted practices of today. Characteristics of "good" measurement programs in today's schools are indicative of the types of programs we may expect to find in most schools in the future. As each elementary school faculty attempts to improve its measurement program, attention should be given to questions such as these:

1) Have the objectives of the school been defined clearly enough so evidence of progress towards them may be collected and evaluated?
2) Does the program provide for gathering evidence on all kinds of learning which are believed to be important—including how the student thinks, how he feels about himself, what values he cherishes, what skills he has?
3) Do the tools for collecting data include a variety of instruments, such as anecdotal records, checklists, questionnaires, rating scales, and teacher-made tests?
4) Is the standardized testing program constantly evaluated in terms of current courses of study?
5) Is adequate assistance available to the classroom teacher interested in obtaining more complete information about his pupils?
6) Are there in-service activities to aid teachers in the interpretation and use of data?
7) Is the evidence gathered used to change classroom procedures?

In answering these and similar questions, the school faculty has an opportunity to examine its measurement program and develop improved techniques.

A good measurement program provides accurate facts on many different types of growth. Growths which are of system-wide concern are generally measured by procedures developed in the central office. Local school faculties assume the responsibility for measuring those objectives which are unique to their schools.

Accurate and complete facts enable the school personnel to evaluate and plan appropriate curriculum improvement activities. Therefore, a good measurement program is basic to an adequate evaluation of the school. School faculties must assume the responsibility for determining the growths they wish to encourage, developing ways to measure growth, and determining the progress each pupil has made toward the desired objectives.



TESTS ARE,

TESTS ARE NOT

Good tests are tests intelligently used.
Tests are neither intelligent nor unintelligent.
The people who use tests can be either.

DONALD ROSS GREEN

A GOOD test is valid, reliable, practical. . . . A scout is trustworthy, loyal, helpful. . . . Most of us can rattle off either list; many of us do just that frequently. In each case, these are fine words, but they are of dubious value when they do not refer to the objectives of some particular action.

But consider the following: The measurement of educational objectives involves objective measurement and one must consider the objectives of measurement in order to measure the measurements and hence the objectives as objectively as possible. Five measures and five objectives equal one nothing.

Many discussions of tests are just as circular and meaningless as this slightly exaggerated example. The difficulty seems to center around a confusion about what tests are, and what they are not.

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Tests Are Not

Tests are a collection of words, questions, tasks, and so forth. But tests are not objective, are not reliable, are not valid. Objectivity, reliability, and validity are characteristics of the way in which tests are used (or misused). Consequently, these characteristics vary according to time, place, and circumstances; they are not inherent in the tests themselves.

Tests can be used, and have been used, to punish students, to keep them quiet, or to keep them occupied. One may consider such a way of using a test unethical, improper, or even immoral. However, it is most unlikely that one would characterize the test as unethical, improper, or immoral unless the way in which it was used was known. So much for what tests are not.

Tests Are

Tests are normally used in an effort to obtain information. They are devices or instruments of measurement, that is, they can be used as a means

of obtaining information which can be ordered, categorized, or interpreted. It is this last characteristic of the way in which tests can be used that leads to a discussion of validity, reliability, and the like.

If tests are to be used profitably, the information obtained must have some meaning. When concrete referents are not available, a single test score is more or less meaningless; a frame of reference is needed. The assertion, "J. J. has a score of 36," has little meaning. One needs to know something about J. J., something about what individuals who score 36 are like, and something about what scores individuals similar to J. J. in one or more dimensions obtain on this test.

The more data available, the more meaning any piece of information—in this case, a test score—can have, provided this information can be put into some structural relationship. In short, tests—good tests—are designed to provide a maximum of meaningful information. This is the purpose for which tests are constructed.

Which Test Is "Better"?

Other things being equal (they never are), the greater the amount of information (as opposed to misinformation) that can be obtained from a test, the more useful the test is, the "better" the test is. The following episode may clarify this point.

The test evaluation committee of a school system had just completed a comparison of the two achievement batteries currently approved for use and the VRP test, a fairly new battery. The committee had agreed unanimously that the ABC and the XYZ, the two older batteries, were good tests, but that on the basis of the reviews found in Buros[1], conformity to the *Technical Recommendations*[2], the data presented in the test manuals, and the comments of the "expert" consultants[3] the VRP was probably the best of the three. Its validities were high, it was reliable and practical. A member of the committee, an elementary school principal, objected to the suggestion that all schools adopt the VRP forthwith. He said: "We changed to the ABC just two years ago. It is too soon to change again." Strangely enough, he was supported by another principal, "I prefer to continue using the XYZ." The committee voted to add the VRP to the approved list.

From this episode, one might conclude: a) Committees are a waste of time; b) consultants are a waste of money; c) principals are inconsistent and stupid. These conclusions are possible.

One might also conclude: d) Principals are well-informed and astute; e) the consultant did his job well; and f) the committee made an intelligent decision. These last three conclusions are, in this case, somewhat more probable than the first three. A different example may clarify the reasons for this assertion.

A student named X obtains a score of 36 on the arithmetic test of an achievement battery. All of the following statements about this score could be accurate simultaneously.

a) X's score is above the average—at the 60th percentile perhaps—of students his age in the normative sample.
b) X's score is below the average—at the 40th percentile, let us say—of students in his grade in the normative sample.
c) X's score is the same as the average score of students in the normative sample one grade below his own.
d) X's score is well above the average of others who are in his room.
e) Considering X's age, general ability, and grade level, his score is quite good.
f) X has shown no reliable improvement on this test since last year.
g) All things considered, a substantial gain in score was not to be expected.
h) X's score is below the point indicating probable success in course sequence M next year.
i) X's score is above the point indicating probable success in course sequence N next year.

This list could, theoretically, be extended indefinitely. Any reliable test with the appropriate norms could supply the information permitting statements (a) through (d). The more reliable

1. Buros, O.K., editor. *The Fifth Mental Measurements Yearbook*. Highland Park, N.J.: The Gryphon Press. 1959. 1312 p.

2. American Educational Research Association and National Council on Measurement in Education, Committee on Test Standards. *Technical Recommendations for Achievement Tests*. Washington, D.C.: National Education Association. 1955. 36 p.
"Technical Recommendations for Psychological Tests and Diagnostic Techniques." *Psychological Bulletin*, Vol. 51, Supplement. 1954.

3. Experts are people who claim they understand manuals and technical reports.

the test and the more adequate the normative samples, the more meaningful these first statements will be. For this kind of information the generally better test, e.g., the VRP in contrast to the ABC, is to be preferred. Theoretically it may also be preferred for information such as that in statements (e) through (i). Unfortunately, perhaps, such statements can be made only after a test has been used for some time and after the scores of students in a particular school have been studied.

It should be noted that because of the frequently large differences between school systems and between schools within a single system, the relationships of test scores to various criteria often reported in the manuals and technical reports of published tests sometimes do not represent the state of affairs to be expected in a particular school. To avoid misuse of test scores, even statements such as (e) above must be based on data collected in the school the pupil is attending. Plainly, assertions such as (f) through (i) could not be made until a school had had more than one year of experience with a test. It may not be too difficult to obtain agreement that these latter statements are more meaningful or at least more useful than the first ones on the list. It is for such reasons that the development of local norms is commonly recommended.

It can be seen that the unwillingness of the two principals to abandon the tests in use in their schools was far from unreasonable. It is fair to presume that the two older tests are very good tests for these particular schools. They are good not because they uniquely fit these schools, although this is also possible, but because the individuals using the tests—the principals, the teachers, and perhaps even the pupils and their parents—have learned something about what the scores mean. It may be added that one can hope that they have also learned what the scores do not mean. Acquiring such an understanding of the strengths and limitations of a test is sometimes painful and is not discarded lightly.

Even a test with severe limitations may be a better test than one with much greater potential usefulness if the possibilities and limitations of the first are understood while those of the latter are not. Teachers, for example, not infrequently make more intelligent use of the tests they have constructed themselves than they do of the elaborately prepared standardized tests given each year in their schools.

Concepts of Measurement

Once it is understood that it is the way in which a test is used at a particular time and place that determines the meaning of terms like reliability and validity, it becomes reasonable to compare tests using these concepts. One can even say, "This test is more reliable than that test," provided this comment is understood to mean that the first test probably can be used in such a manner that the results will be more reliable than those obtained from the second test, under the same circumstances.

Reference has been made to most of the concepts of measurement to be considered. However, a number of these categories tend to overlap. Since validity is the most important of these concepts, it will be convenient to consider the others first.

Practicability

The questions subsumed under this heading are typically simple ones if the strictures laid down in the discussion above are followed. When considering the use of a test in a particular situation, few people are likely to overlook such things as cost, facilities and equipment needed, ease of administration and scoring, degree of skill and training needed by personnel involved, timing, and the like. Naturally these things must be weighed against value received, e.g., amount of information obtained (see sections on norms and validity) and possible frequency of usage (number of forms and levels).

Objectivity

Objectivity refers to scoring procedures, not to the form of the test items. An essay test can be scored objectively (sometimes at the expense of validity) if the rules for scoring are made sufficiently specific and precise. If any student's responses would receive the same score from all qualified scorers following the rules, the test can be said to be objective. Degrees of objectivity are possible and a test scored in a less than perfectly objective fashion may nonetheless be useful.

Objectivity is desirable because potential reliability and validity are reduced to the degree it is lacking. However, objectivity in no way guarantees reliability or validity.

Reliability

Oddly, people often wax emotional about objectivity, perhaps because they confuse it with form, but they rarely get much excited about reliability. Yet it bears the same relationship to validity as does objectivity. Just as objectivity does not insure reliability, reliability does not insure validity. Similarly, however, lack of reliability tends to limit validity.

Generally speaking, reliability refers to the relative influence of transient phenomena (called chance factors or errors of measurement) in contrast to the relatively stable characteristics of the pupils being measured. A standardized test is often more reliable because procedures and conditions of administration are specified, thus eliminating or reducing the influence of some factors which commonly influence test scores, e.g., timing, directions, instructions about guessing, working conditions, and so on.[4]

There are several different procedures for determining reliability, and they typically yield somewhat different results because they classify different phenomena as chance or error factors. The purposes for which the test is going to be used and certain characteristics of the testing procedure determine which is the appropriate approach to reliability. In the case of achievement tests, for example, a retest with a parallel form is preferable, the rarity of the procedure notwithstanding.

Like validity, reliability is dependent upon the group being tested as well as upon how they are being tested. The scores of a heterogeneous group will appear more reliable than those of a more homogeneous group. Another common finding is that longer tests tend to be more reliable than shorter tests.

Two ways of reporting reliability are commonly employed: the reliability coefficient and the standard error of measurement. The latter form is used relatively rarely but when its meaning is understood, it has several advantages over the coefficient.

The topic of reliability has been more thoroughly explored and is better understood than most matters related to measurement. The literature on the topic is voluminous and the refinements are almost endless. All texts on testing and measurement carry extended expositions of its ramifications.

Scores and Norms

The basic element in any test score is the number of reponses classified in certain categories, most frequently "right" and "wrong." Whatever the method of computing a score, it must be compared with some standard to have any meaning. Many varieties of standards are in common use.

One common type of standard is the classification of certain percentages of correct responses into letter grades, such as A, B, C, D, and F, to which meanings have already been assigned. This procedure is essentially arbitrary and often contributes to the use of relatively inefficient tests. If 70 percent right is necessary for "passing," the tests are usually constructed so that almost every pupil who is to be tested can answer half the questions correctly with ease. The result is that a large portion of the testing period is wasted. The procedure also evades the question of validity since usually the meaning of the letter grades is established first; the assignment of these letters to percentage scores is next; and then the test is constructed and given. The meaning of scores, then, is not influenced by the characteristics of the test, the pupils, or the circumstances of testing.

To help avoid such arbitrary devices for attributing meaning to test scores, published tests are usually accompanied by norms. Norms indicate what scores various groups of people have obtained on the test. Perhaps the test has been given to a more or less stratified random sample of public school pupils in grades two through seven in the United States. The user of the test can then compare the scores obtained with those of the normative sample. Such comparisons, rather than test scores, are often recorded on records. Grade scores, percentile ranks and bands, standard scores, and deviation IQ's (a form of standard score) are examples.

Such "scores" are very useful but they are also somewhat dangerous because they seem to imply that the comparison is appropriate and valid. Everyone knows that norms are not standards, yet many of us ignore this fact over and over again. One way of reducing the frequency of such misuses of test scores is to use several varieties of norms when interpreting a set of test scores. This is particularly likely to be helpful when con-

4. Sometimes the term "standardized test" is used in reference to any test accompanied by norms.

sidering tests validated on the basis of content rather than prediction (see below). The case of X discussed earlier illustrates this point.

It is helpful to have not only a variety of norms available but also data from a variety of normative samples. Groups differing in age, general background, type of training, ability, and the like will usually tend to perform somewhat differently on a test. If such differences are reported, more reasonable interpretations of test scores become possible. National norms have a tendency to conceal the influence of many such variables. The unique features of a school and its pupils may make comparisons with national averages rather pointless. Again, it can be seen that developing local norms is a worthwhile endeavor.

It may be reiterated at this point that norms indicate how the normative sample performed, not how they or any other group could or should perform. The more nearly similar the group being tested is to the normative sample, the more reasonable it is to make comparisons, and tests should be selected with this in mind. Questions about what scores mean in relation to what pupils can, should, will, or have done are questions about validity and need to be considered separately regardless of the merits of the norms offered.

Validity

The widely quoted assertion to the effect that "a test is valid to the extent it measures what it purports to measure" assigns validity to the test and not to the way it is used. Thus confusion often reigns. All tests have different degrees of validity for different uses, for different groups of students, and for different circumstances of testing.

Validity refers to the adequacy of any interpretation of a test score. It depends basically on the degree to which a set of scores is relevant to some criterion. Establishing the criterion involves a whole host of problems. Suffice it to say that a criterion must be defined and measured if validity is to be estimated. (Validities are always estimated rather than determined.)

Four standard categories of validity are used. They are content validity, concurrent validity, predictive validity, and construct validity. These categories refer to the manner in which validity is estimated. Since construct validity is primarily of interest to psychologists and researchers, it will not be discussed.

Content validity is typically estimated for achievement tests by comparing the knowledge, understandings, and skills required to answer the questions with those included in the course of study. Since courses of study often differ, it is the rare test that can have a high degree of content validity for more than a scattering of schools. If a high degree of content validity has been inferred, then the interpretation of the scores as measures of achievement is valid. When the comparison indicates low content validity, such interpretations are misleading at best.

The estimation of content validity is often laborious and usually difficult. For example, the apparently reasonable assertion that such and such an item involves this piece of information or that skill can turn out to be inaccurate when the reports of pupils about how they actually went about obtaining the answer are considered. The vagueness of educational objectives complicates the problem.

A comparison of test scores with other measures of current performance provides an estimate of concurrent validity. Group intelligence tests are often validated in this manner, using individual intelligence test scores as the criterion. If correlations are high, the more economical group test can be used in place of the individual test with some confidence.

Predictive validity differs from concurrent validity in that the comparison is made with future rather than current performance. The use of any set of test scores for predictive purposes requires high predictive validity to avoid serious errors.

Most tests published in recent years contain elaborate reports of validation procedures. Yet many unsupported statements that the test may be used for this purpose or that are to be found in the publishers' blurbs. Lack of data need not be an indication of a poor test since no test can be validated for all possible uses. But before a test is used for some specific purpose, an estimate of the procedure's validity should be obtained. Schools planning to use any test on a large scale have an obligation to perform this task themselves. Even if a test were reliable, objective, practical, and well-normed, only substantial indications of validity would justify its use.

Good tests are tests intelligently used. Tests are neither intelligent nor unintelligent. The people who use tests can be either.

Intelligence... its nature and measurement

RICHARD HARSH

THE human mind is our fundamental resource. Such a statement has been a frequent pronouncement in recent literature. Descriptions of man have always included characterizations of individual differences as well as similarities. However, the products and refinements of the various sciences have led to more explicit definitions of the various aspects of man. The term intelligence is one reflection of this endeavor to describe a dimension of man.

Intelligence has been the term or label used to refer to a quality or condition of individual difference. As individuals showed differing speed and accuracy in solving a problem, assembling a device, or devising a plan of action, the comment was made that one person had a lot and another person had less of this quality called intelligence. Intelligence has been a construct devised to explain the potentialities of the human being for learning, for producing, and for adjusting to the environment.

From the inception of modern mental measurement, a variety of issues have been of concern in defining the nature of intelligence. The emergence of contemporary thought regarding the nature of mental abilities or intelligence probably relates in part to the research which has been concerned with:

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- The distribution and extent of individual differences found in the total population
- The contribution of heredity and environment to human abilities
- The relationship between physiological status and the behavioral characteristics attributed to intelligence
- The relationship of education or training to measured mental abilities
- The qualitative and quantitative characteristics of extremes in human abilities as represented by mental deficiency and genius
- The effect of social, class, and cultural environments on the development of mental abilities
- The development and validation of a theory of mental organization.

The results of these research findings have pointed out the complexity of the concept referred to by the term intelligence. One part of the complexity deals with the multiple factors which may facilitate or retard the development of human abilities. A second aspect of the complexity was revealed by attempts to validate the practical significance of the existing measures of intelligence in predicting excellence of human behavior in product and adjustment.

Recognizing the danger of oversimplification, it is nevertheless felt that some brief summarization of these research findings would be helpful in relation to this discussion of the nature of intelligence and the aspects of intelligence measured by some of the more commonly used tests.

Degree of Individual Differences

The research suggests that individual differences are qualitative as well as quantitative. The normal curve appears to be a reflection of quantitative differences found by a variety of measures of mental abilities. In some cases, sampling irregularities, special environmental conditions, or characteristics of the measuring instrument produced other than bell-shaped curves. These exceptions, however, have not disproven the concept that human abilities tend to be distributed in a normal curve.

There is substantial agreement that the quest for absolute measurements of extent and variability of different traits is unfruitful. The degree of individual differences is a relative quantity in any measured dimension. This is due both to the lack of comparable units for measuring various traits and to the absence of a means of establishing absolute zero points on psychological scales.

Effects of Heredity and Environment

Research dealing with heredity and environment suggests that their effects are inextricably intertwined. Heredity sets certain limits within which the organism may develop. In the case of psychological traits, these limitations for most persons may be so wide as to allow almost unlimited variation. At the same time, there seems to be little evidence that a given intellectual trait can be directly dependent upon heredity. The variations in the extent of development of the inherited potentials are a reflection of the stimulation of the environmental conditions.

Specific research concerned with heredity has directed attention toward such aspects as family resemblance, similarities of the biological organism, organic conditions limiting human development, physical deficiencies, and selective breeding. Specific researches concerned with heredity have attempted to determine the contribution of the structural properties of the organism. There is agreement that a healthy, optimally reacting organism is essential for maximum development. It is also recognized that certain congenital conditions may limit or enhance mental development. More recent research with the basic neuromechanism suggests the contribution of this fundamental element for learning potential and reactivity of the individual. So far, the attempts to determine precise differences or measurements of the contributions of heredity and environment have been inconclusive. Agreement is found regarding the constant interaction and mediation of these two contributors to the development of human potential. Although some might suggest that heredity and environment should be viewed only as separate contributors, they appear to be like two courses of water mixing together in a stream that is subsequently reflected in levels of human development.

The studies of identical twins have illustrated that impoverished environments tend to depress the possible development and, conversely, rich and stimulating environments tend to accelerate and expand the person's development.

The studies of the Kentucky Hollows illustrate that the demands of the society or culture may

offer specific requirements and stimulations to the development of mental abilities. Other studies which noted the change of mental abilities as individuals were moved from impoverished to rich environments give additional evidence of cultural impact upon human development.

Research dealing with the relationship of education to developmental abilities has consistently shown a direct positive relationship. Generally, the higher measured mental abilities of children have been found in families engaged in the occupations requiring greater amounts of educational training. Research has produced similar findings when relating the children of parents of different occupational groups to mental ability. These relationships, however, which suggest a substantial positive correlation between education and mental ability, also are apparently related to the type of measurement or method of assessing intellectual differences.

Other research has suggested a positive relationship between emotional and personality factors and the development of human abilities. Still other research studies have pointed up the impact of social class and cultural environments in stimulating mental abilities. These studies are similar to those dealing with education and occupational differences. It should be mentioned, however, that studies with canal-boat children, migrant gypsies, or mountain children typically reveal less satisfactory stimulation of such cultures on measured abilities. These findings might lead to the hypothesis that the deficiencies noted may be the result of both the nature of the functions tested as well as the influence of the environmental deprivation. A similar kind of hypothesis might also be drawn in relation to the wide differences found when measuring urban and rural population with the same instrument.

Some studies suggest that differences between social classes or regions may be related to the specific functions tested. It is hypothesized that each cultural group tends to foster the development of a characteristic pattern of aptitudes as well as values and personality traits. If a test which is used to assess mental ability measures a pattern of aptitudes, values, or traits dissimilar to those of a particular culture, conclusions might be drawn that the measured group was inferior to that on which the test was standardized. Thus, many studies have concluded that tests constructed within a particular subculture (eastern urban, for example) tend to measure aspects of that culture and, thus, obviously favor individuals reared in that culture. We must conclude that assessment of intelligences or mental abilities must be interpreted in terms of the criteria from which the test was constructed and validated.

Viewpoints on Intelligence

Within this century, definitions of intelligence have featured many different views. Some definitions have featured learning, others memory, others adjustment, and others abstraction. Some scientists reacting to this question of what intelligence is have replied, "Intelligence is what my test measures." Such circular thinking, although somewhat humorous, has unfortunately led to limited concepts and behavioral definitions of the nature of intelligence. Furthermore, it has tended to promote the concept that intelligence is a single substance or quality.

Everyday observation of the layman, or statistical validations of measurement results by the psychometrician, or attempts to predict success in various educational or occupational areas have led to a common conclusion. This conclusion is that none of the widely used measures of mental ability which suggest a single quotient to characterize the abilities of man are comprehensive measurements. Convergence of thought and concept in relation to intelligence has pointed toward the variety of mental abilities which have qualitative as well as quantitative differences among members of the population. The description of mechanical, social, verbal, abstract, or spatial-perceptual abilities is a reflection of convergence of concepts that a man is characterized by a variety of mental abilities. Each person represents a profile of abilities. Each person's abilities reflect the stimulation and opportunity provided by the heredity, culture, family, education, and other contributors to human development.

Some of the limited concepts of intelligence are specifically related to the somewhat limited means of measurement which have been in wide usage. Concepts have tended to be in advance of the development of the technical measures. Hence, many of our school paper-and-pencil measures of intelligence or mental ability were really only measures of word meaning, manipulation, or fluency. They were further mainly reflections of

convergent thinking dealing with common educational contents of an urban culture. The perceptual, the mechanical, or the spatial were frequently unmeasured dimensions when an intelligence quotient was cited for an individual.

At the present, broader concepts are presenting theoretical models which more adequately describe the variety of mental abilities of man. J. P. Guilford suggests that:

- Intellectual abilities may be classified according to operation (cognition, memory, production, and evaluation)
- Intellect may be classified in terms of content such as figural, symbolic, or semantic
- Intelligence may be classified according to product such as elements, classes, relations, systems, or implications.

In this area of product, Guilford's model has suggested the importance of convergent as well as divergent thinking. An emerging dimension may be the social or behavioral abilities which have previously been related to personality patterns, but are apparently inextricably related to the manner in which the individual receives, focuses, and produces in the various intelligences he possesses.

This model by Dr. Guilford obviously highlights the fallacious concept of the intelligence quotient. Intelligence is not a unitary substance. Research clearly points to the intelligences of man.

Intelligence has been used by many to mean the innate ability with which a person is born. Hence, intelligence was seen as that which a person inherited, as unchanging or unmodifiable and constantly predictive of the amount a person could learn. The research dealing with heredity and environment, physiological conditions, education, and cultural influences has shattered the myth that intelligence is solely a reflection of the inherited capacities of the person.

Meaning of IQ

Reference made to the intelligence quotient is frequently done in a manner which suggests an immutable inherited characteristic. We know, however, that the intelligence quotient is merely a numerical representation of how well a given child performs on a particular series of test items in relation to the performance of other children of similar age. This is certainly quite different from an exact measurement of the inherited capacities of the person. When the individual is subsequently tested with a different series of items or tests, it is not uncommon to find an intelligence quotient that varies considerably from the first measurement. This is not only understandable, but expected when one considers the tasks required by the test items.

Some educators have been troubled as they viewed cumulative records and saw the Goodenough IQ of 140, the CTMM IQ of 120, and the Otis IQ of 110. Such results have prompted a variety of reactions. Some would debate, "Which score is correct?" Others would suggest, "Take the last test score. It is probably the most accurate." Still others would suggest, "Average all the scores together and you probably have the best indication." Still others would suggest, "Well, I guess none of the tests are very accurate when they vary this much."

None of these suggestions or explanations sound very appropriate if we consider merely the item content of these several tests. The Goodenough Draw-A-Man IQ is based upon the graphic motor representation of the human figure which the subject is able to draw on a blank sheet of paper. The California Test of Mental Maturity at the primary level presents pictorial material to be classified according to similarities and differences; forms to be interpreted or imaginably manipulated; pictures of objects for which verbal classifications and meanings must be identified; quantitative concepts and manipulations; and appraisal of the vocabulary development. The test items present verbal as well as non-verbal materials. Material is presented to and suggested for the subject to react to. Still an IQ is derived based upon items which are testing very different qualities from the Goodenough. The Otis Test presents items which are mainly verbal descriptions of word meaning, reasoning or classification, and numerical reasoning. Skill in reading comprehension and the level of vocabulary development become crucial items to success on this particular test. Here, too, an IQ is computed.

These general characteristics of these three measures should reflect the difference in performance and task for the student. The IQ's have only one thing in common. They compare the subject's performance with others of the same age or classification. Their differences lie in the task assigned the subject to complete and the degree of excel-

lence suggested or expected by the norms established in the standardization of the instrument.

Scholastic Aptitude Tests

To suggest that any one or all of these measures gives a comprehensive picture of the intelligences of man seems totally fallacious. Paper-and-pencil tests in wide usage in the schools tend to be most commonly subjecting students to verbal and numerical tasks presented in printed abstraction. Many of these items have been specifically selected because they tend to have good predictive value in relation to subsequent scholastic progress of the students. The common use of the term intelligence test for these paper-and-pencil instruments widely administered in the schools should probably be discontinued. A more appropriate term would be a measure of scholastic aptitude or a test of academic aptitude. These are not tests of pure inherited qualities. What is measured by these tests are the developed abilities which reflect a combination of what the person inherited in organic characteristics and the variety of environmental influences and training he has received. Scholastic aptitude should be defined as those inherited and acquired capacities which indicate the relative speed, accuracy, and breadth of scholastic learning.

Some tests included in measures of "intelligence" are assessments of abilities which are poor predictors of scholastic success. For example, test problems asking the individual to visualize the movement of forms or objects in space or organize parts of the device have been found to be relatively unpredictive of scholastic success. These test items probably do an effective job in describing a perceptual or spatial ability which may be important for other types of learning and productivity.

Achievement Versus Scholastic Aptitude Tests

Some persons question whether the paper-and-pencil measures of scholastic aptitude are any different from the conventional achievement tests which are administered. Yes, they are different. Measures of scholastic aptitude present test items which assess the generalized accumulation of learning and development which is obviously a reflection of both the inherited capacities as well as the environmental stimulation. Since the measurement of capacity may only be made through devising problems of situations the individual must react to, it is necessary to use some of the same content which is found in achievement tests. The crucial element of difference, however, is in the specificity of content assessed. For example, a scholastic aptitude test frequently presents a complex reading comprehension problem for the individual to pick out the most logical solution or cause. The content tends to be sufficiently general so that it might be applicable in any school regardless of the particular curriculum content.

In contrast, an achievement test in history or geography would probably deal with those specific informations required in a history or geography course. The scholastic aptitude test is a measure of the generalized achievements which may be focused and utilized in the solutions of new and unique problems. The score is a reflection of the speed, accuracy, and breadth of this problem solution. The achievement test is the reflection of the extent and depth of comprehension and retention of the specified content of a given subject field, such as arithmetic, French, or economics.

Differences in Performance

The dimensions of intellect defined by Dr. Guilford make specific reference to the variety of intelligences possessed by man. This description of the nature of intellect is an attempt to make further realistic refinements of the broad and ambiguous concept which for so many years was referred to as intelligence. The distinction between aptitude and achievement is applicable for these new dimensions of intellect as well as the distinction drawn between the more commonly used tests of scholastic aptitude, such as the Kuhlman, California, or Otis tests.

The commonly used paper-and-pencil test of scholastic aptitude tends to measure such things as mastery of previous learnings, attention span, memory, comprehension, analogies of dissimilar association, organization of ideas or facts, vocabulary, associational implications, recognition of rules, principles, or operation. All paper-and-pencil tests do not measure the same functions. The Otis, CTMM, Chicago Non-verbal, Kuhlman-Anderson, PMA, and SCAT make rather different assessments of intellect. Rather wide differences might be anticipated in IQ performance on the Chicago Non-verbal and Otis, or the Terman-McNemar and the PMA.

The measurement of intelligence is mental measurement. Mental measurement is indirect measurement. Indirect measurement is dependent upon items designed to sample behavior of the subjects. The behavior sampled is directed by the particular directions or content of the items. Various tests present different content and situations for the subjects to respond to. Variations in item content suggests probable variations in IQ's which will result. Our conclusion would most naturally be severalfold.

- Variation in IQ may be expected when measured by different tests.
- The variable performance on a variety of tests is helpful rather than discouraging in that these variations may point up a profile of abilities as reflected by the differences in the various measures.
- Predictive use of measures of various kinds of intellect may be tremendously increased when diligent attention is given to the psychological functions employed and the products or outcomes demanded by the items in the particular tests.

Conclusions About Human Intelligence

Finally, the result of this research leads me to certain conclusions regarding a verifiable concept of intelligence as well as practical uses of the measurement of human intelligence. Obviously, our conclusions have rather direct relationship to educational interpretations as well as to the provisions made in the educational program.

First, I conclude that the IQ or intelligence quotient is a misleading and fallacious concept if it is used to describe the comprehensive intelligence of an individual. The IQ suggests that a single measurement characterizes the diversity and quantity of human abilities which we make reference to as a person's intelligence. I believe it is fallacious to refer to a person's intelligence in the singular. Research clearly shows us that we must speak of the intelligences of man.

In education, we have used measures of intelligence as estimates of expected achievement. There are certainly many types of mental abilities which show no high relationship to academic success. Thus, we make reference to measures of mental abilities that have high relationship (or predictive value) for academic success. Such measures might realistically be referred to as indications of scholastic aptitude. In a similar vein, there are measures of spatial, mechanical, and social abilities which are apparently quite separate from these scholastic or academic abilities.

The research with various types of thinking suggests that there may be several types of scholastic aptitudes rather than the dominant one we have used in the past. I refer to the verbal meanings and abstractions measured by convergent thought items. There is high probability that other scholastic aptitudes related to divergent thinking with various symbols or content may be meaningful dimensions for educational prediction and planning.

Some are of the opinion that if an individual has high ability in academic aptitude he consequently has high ability in all other aptitudes. Such an assumption appears unsubstantiated; however, there is still doubt regarding the degree of relationship between the variety of intelligences or aptitudes within any person. The evidence of the variation of abilities demonstrated by any individual suggests that high aptitude in one type of intelligence is not necessarily a predictor of high aptitude in all others.

A third conclusion would suggest that the description or characterization of any person should be made in terms of a profile of his various mental abilities. Recent research suggests that the profile would probably need to be tridimensional so that the motivation, products, and expressions illustrating the variety of interpretations might be adequately represented. We have heard the statement, *"He looks at the person and he is reading him."* This is not a conventional description of the reading process, but it is perhaps analogous to a type of human ability which is quite different from the comprehension of verbal abstraction measured on either a reading or abstract verbal intelligence test.

Of course, the final implication of all this is obvious but worthy of mention. Educational experiences must be realistically planned for the diversity of human abilities which are known to be existent and capable of development. It would further imply that rather separate and discrete measurements are necessary to describe adequately the variety of human abilities which exist in a student population encompassing the variety of geographical and cultural settings in the many schools of our country.

Standardized Achievement Tests...

uses and limitations

ROBERT L. EBEL

STANDARDIZED tests of educational achievement are essential educational tools, especially in the elementary school. They can be used to improve the effectiveness of the competent teacher or school administrator. They can help motivate and reward the child. They can provide a basis for constructive cooperation between parents and teachers in guiding the child's educational development. They can help the school staff and the community it serves assess the effectiveness of the school program.

A demonstration of how standardized tests can focus public attention on an educational need occurred recently in New York City. Results of a city-wide standardized reading test showed that the average reading ability of school children in New York was below the national average. A few years before, it had been above the national norm. While these findings were doubted, discounted, and rationalized by experts and spokesmen inside the schools and out, there was almost universal support for the vigorous action taken by the Board of Education to strengthen the program of reading instruction. Among other things, the number of specialists in remedial reading on the school staff was sharply increased.

This use of standardized tests as a basis for judging the effectiveness of a school program has been criticized by some educators. They point out that half the pupils or schools *have* to be below the norm and that remedial programs can never alter this situation. Further, they say, it is unreasonable and unfair to expect the same levels of achievement of all pupils and all schools. A pupil ranking well above average may, in fact, have less reason for self-satisfaction and complacency than a pupil ranking below average, if the high ranking pupil had educational advantages the other lacked.

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There is merit in both these criticisms, perhaps more in the second than in the first, but it would be dangerous to accept them completely. No pupil, no teacher, no schoolboard, no community should be continuously satisfied with their educational achievements, and few are. Information provided by standardized tests of achievement helps them focus their dissatisfactions more purposefully and take remedial action more constructively.

The second criticism is sometimes used in general terms as a rationalization for below average performance. It contains enough truth to be a persuasive argument for unsound interpretations of test results and for inaction when action is needed. On the basis of intelligence tests and other measures, we know it is unreasonable to expect the same achievement of all pupils and all schools. Unfortunately, the usual effort to obtain a standard of reasonable expectancy of achievement from intelligence test scores is based, I think, on some misconceptions about intelligence, achievement, and the educational process.

The important point to remember is that most pupils and many schools could achieve considerably more than they have achieved. Further, it is probably true that the pupils and schools which are below average in achievement have both the greatest need and the greatest opportunity to improve.

Understanding the causes of inferior achievement is an important prelude to effective remedial action. No child's potential and no school's potential for educational achievement is unlimited. But this should never be used as an excuse for inaction.

If standardized tests are valuable tools, why do many schools lag in using them effectively? Lack of full awareness of the potential value of test information and lack of training in how to use that information may be partly responsible. But there are also three common misconceptions about

educational testing which may account for much of the skepticism about the value of tests and the reluctance to use them more extensively.

Importance of Tangible Outcomes

The first of these misconceptions is the belief that the most important outcomes of education are too subtle, too complex, too subjective to be measured effectively. Elementary school teachers are less guilty on this score than some college professors who take off on flights of fancy when discussing intangible but supposedly essential outcomes of education.

Teachers of young children know that the development of skills in the tool subjects and the establishment of solid foundations for understanding and interest in the major fields of human knowledge are concrete, specific, important objectives. But some of them may feel that tests, especially objective standardized tests, fail "to get at" the real essentials of achievement in these skill and foundation subjects. This mystical devotion to a hidden reality of achievement which is more essential than overt ability to perform has never satisfied the research worker. He wants to know the nature of this hidden reality and what evidence there is that it is important.

Danger of Overemphasis on Adjustment

The second misconception about educational testing arises from overconcern with the child's immediate happiness and self-satisfaction. Extreme supporters of this view often regard testing as an unfriendly, threatening, anxiety-generating process. They would shield the child from its stress and possible pain. I demur, and call as a first witness the physician.

Most of us learn to adjust to the physician's prescriptions, whether they are bad-tasting medicines, disinfectants that sting, shots that hurt, or even surgery. There is some emotional stress and discomfort, but the end result is usually increased health. To do what must be done a doctor needs courage, but this implies no lack of sympathy. What it does imply is farsighted concern for the ultimate welfare of the patient.

I have been appalled by the lack of this farsighted attitude among some advocates of child-centered education. They talk as if the teacher's primary responsibility were to guard the child's ego against any bruises whatsoever. Let him achieve as much as he can without strain, they say, but be careful not to ask too much of him. Their excess of concern for protection of the child's present "security" may, however, encourage neglect of needed small readjustments until they accumulate into a crisis of major proportions.

Take the case of Sharon which illustrates a problem all too many schools and families have become unhappily acquainted with in recent years. Sharon was the third of four children in an upper middle-class family. Her early years at school were uneventful. Periodic descriptive reports indicated that she was adjusting well and making progress. If any standardized tests were given, the significance of the results was not reported to the parents.

Midway through the third grade, trouble developed. Sharon began to say she hated school and to seek escape by feigning illness. Investigation showed that the basic problem was that Sharon couldn't read, at least not nearly as well as her classmates. They were beginning to refer to her as "dumb." The parents proposed that Sharon attend the reading clinic of a nearby university and perhaps get special individual instruction. The school staff counselled against such a step, arguing that they could provide all the special help needed, now that the problem had been identified. Further, they said, much harm could be done if too much attention were paid to the problem. Better to treat it as casually and quietly as possible, they said.

Despite some misgivings, Sharon's parents agreed. For a while, things seemed to improve. Sharon was happier in school. She brought home reports of small triumphs, of special recognitions and opportunities. The school reports, still couched in general, unthreatening phrases, indicated generally satisfactory progress. Then, near the end of Sharon's eighth-grade year, trouble developed again. Her teacher recommended that she repeat the grade because of her serious reading disability. The special attention she had received had apparently taught her to learn by listening, but she had not learned effective self-direction in reading.

After some plain-speaking conferences between teacher and parents, Sharon did not fail. She did go to summer reading camps. She went on to high school and took five years to finish college instead of four.

If the school had had a systematic program of standardized testing and had reported the results regularly, Sharon's reading disability would probably have been identified before it was translated into an emotional and social problem. And once the difficulty was identified, if the school had been more concerned with Sharon's future welfare than her current happiness, the problem might well have been corrected before it affected her subsequent schooling. In education, as in medicine and justice, an excess of present sympathy can postpone or even defeat the procedures necessary for an individual's future welfare.

Limited Value of Purely Local Objectives

The third misconception about standardized educational achievement tests results in their avoidance or de-emphasis on the ground that this teacher's objectives or that school's objectives are uniquely different from those for which the standardized test was presumably built.

We all recognize that it is desirable for both teachers and schools to have freedom to experiment with new materials and methods and that it is unwise for them to be bound tightly to a rigidly prescribed curriculum. It is good that they can capitalize on their own unique talents and opportunities. But it is also necessary that they recognize their responsibilities to develop the same basic skills and fundamental understandings which other teachers and other schools are seeking to develop.

What constitutes a good elementary education today in Bangor, Maine, is not radically different from what constitutes a good elementary education in Los Angeles, California. Even if the ideal elementary education in one locality should differ from the ideal in another, it would be unwise to build an educational program around only the local needs. For it is certainly true that many of those educated in one place will spend most of their lives in some other.

One of the essential values of a well-constructed standardized test is its reflection of expert consensus on nationwide objectives of achievement. Instead of asking how well the standardized test fits local objectives, the test selector should ask with how much competence the test constructors can speak concerning the common objectives of all schools. A teacher should not ask a standardized test to provide evidence on how well she has taught all the things she has tried to teach, but only on the things that all teachers ought to have taught. For those achievements which are truly and rightly unique to a particular school or teacher, locally constructed tests are the best answer.

Will the Test-Makers Dictate Curriculum?

Many of those who mistrust the nationally developed standardized tests of achievement frequently express fear that the test-makers will dictate the curriculum. There is some basis for this belief, but it should not be a source of anxiety. If the standardized test is taken seriously, it will certainly exert some influence on teaching. But if the test is constructed by competent experts, that influence should be more beneficial than harmful.

The content and emphasis of textbooks, courses of study, teaching methods, and tests of achievement should all be sanctioned by the same kind of authority—a consensus of expert judgements. If the test-makers try, as many of them do, to catch and reflect in their tests a consensus of the judgement of curriculum specialists, it seems unreasonable to charge them with attempting to dictate curricular developments. If standardized tests of achievement are supplemented by locally constructed tests, there is slight danger that the use of standardized tests will result in undesirable uniformity in curricula.

Expert Test Construction

A well-constructed standardized achievement test provides an independent, broadly based definition of *desirable goals* of achievement in *all* schools. This is one of its primary values. Two others are related to it. The first is expert, painstaking test construction. The second is independent, broadly based norms of achievement.

Those who prepare standardized tests, in consultation with subject-matter experts, usually are skilled in writing items. In addition, they pre-test the items to identify those which are too difficult or too easy or which fail to discriminate clearly between high and low achievers. Careful attention is also given to the balance of the test among content areas and item types.

The result of the expertness and care applied to the construction of a standard test of educational achievement is usually a technically better

test than a local teacher or group would be likely to create. The tasks it presents are those the pupils should be able to handle. The scores it yields discriminate reliably different levels of achievement. It is usually convenient to administer and score and is efficient and economical in its yield of useful information.

The provision of national, regional, or statewide norms for score interpretation is a third valuable contribution of the standardized achievement test. To secure accurate norms for clearly defined and widely appropriate reference groups is not a simple matter. It is even more difficult to present these norms so that they will be easy to use and to interpret properly.

These norms enable the user of a standardized test to obtain an external, broadly based standard for judging the achievements of pupils. Norms are not universal standards. Nor are they self interpreting. An oversimplified approach to test norms can rob them of much of their potential usefulness. After the comparison of local achievements with external norms has been made and the difference noted, one must still ask, "Is this good or bad?" and "Why do we seem to do so well, or poorly?" and "Under the circumstances, what should we do about the situation?" Standardized tests and their norms will not provide any automatic answers, but they can provide the basis for wise planning and for more reasonable decisions.

Schools exist to educate pupils, but it is the exceptional classroom teacher or school administrator who can report very precisely how much learning the pupils have acquired. Enrollment, attendance, and per-pupil cost can be specified accurately and in detail, but the acquisition of skills, knowledge, and attitudes is not readily stated in statistical terms. Educational achievement is not easy to measure, and existing tests leave much to be desired. But relatively few schools and teachers are obtaining and using even a small fraction of the information on educational achievement that existing tests could provide. I am persuaded that competent teachers and school systems can improve their effectiveness rapidly by making good use of existing standardized tests of educational achievement. Combined with other efforts, the systematic and skillful use of standardized tests should move any school toward higher levels of achievement.

For More Information

The bulletin *Selecting an Achievement Test* (5), published by the ETS, offers many helpful suggestions as to principles and procedures. Noll's book (7) should also be helpful, particularly Chapter 8 on "Measuring Achievement in the Elementary Grades."

For the teacher who has some solid background knowledge of educational measurement, Buros' *Fifth Mental Measurements Yearbook* (2) will prove a valuable source of information about published tests. For many of these tests, critical reviews have been written by specialists. While the reviewers are not infallible, most test purchasers find this volume highly useful. A comprehensive index to *Tests in Print* (3), also edited by Buros, is scheduled for publication this year.

Those concerned with selecting achievement tests will find valuable guides in *Technical Recommendations for Achievement Tests* (1). Another recent and highly useful bulletin is *Testing Guide for Teachers.* (8). Somewhat older but still authoritative is the book by Traxler and others (9).

Two other general references may be useful. The first is a symposium on "The Place of Testing and Evaluation in Learning" (6). The other, also a symposium, presents the answers of six specialists in testing to "Eight Critical Questions About the Use of Tests"(4).

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1. AERA Committee on Test Standards. *Technical Recommendations for Achievement Tests.* Washington, D. C.: American Educational Research Association. 1955.

2. Buros, O. K., (editor). *The Fifth Mental Measurements Yearbook.* Highland Park, N. J.: The Gryphon Press. 1959.

3. Buros O. K., (editor). *Tests in Print.* Highland Park, N. J.: The Gryphon Press. 1961.

4. Ebel, Robert L. "Eight Critical Questions About the Use of Tests." *Education* 81:67-8; October 1960.

5. Educational Testing Service. *Selecting An Achievement Test.* Princeton, N. J.: the Service. 1958.

6. Harsh, Richard (coordinator). "Symposium: The Place of Testing and Evaluation in Learning." *California Journal of Secondary Education:* 35:40-65; January 1960.

7. Noll, Victor H. *Introduction to Educational Measurement.* Boston: Houghton Mifflin Company. 1957. 437 p.

8. Technical Subcommittee of the Independent Schools Advisory Committee. *Testing Guide for Teachers.* New York: Educational Records Bureau. 1961.

9. Traxler, Arthur E., and others. *Introduction to Testing and the Use of Test Results in Public Schools.* New York: Harper and Brothers. 1953. 133p.

MEASUREMENT of Personal-Social Factors

JOHN W. M. ROTHNEY

THERE are 17,953 terms (chiefly adjectives) in the English language which may be used to designate distinctive and personal forms of behavior.[1] Which of these thousands should we attempt to measure?

A study of a sampling of school report cards produced a list of 260 commonly used trait names, but analysis revealed that many had somewhat the same meanings, even though different names had been used. Since it would be impossible for any school to measure more than a small fraction of all the possible characteristics of its pupils, and since it is essential to delimit an area before measurement procedures are devised, a school faculty must develop some criteria for selection.

Deciding What To Measure

Four criteria may be used in the selection process. The school will be concerned first with *differentness*. Characteristics to be measured should be sufficiently independent so that intercorrelations among measurements are not too high. Otherwise, substantially the same areas will be covered and unnecessary duplication may result. A second criterion, *importance*, must be considered because no time should be wasted in gathering information which does not throw significant light on the pupils who are being studied. Since the importance attached to various behaviors may differ in schools, it is essential that faculty members decide what they consider important enough to measure. Use of the third criterion of *completeness* suggests that a school will expect measures to produce a reasonably complete picture of the individual. Obviously, the first and third criteria must be considered together. A fourth criterion, *observability*, implies that a pupil's teachers would have opportunity to observe significant behavior in relation to the characteristic that is measured. Attempts to measure personal-social factors which teachers cannot relate to behavior they observe in classrooms are not likely to produce meaningful results.

Without verbalization of these four criteria and, perhaps, without conscious awareness of them, many teachers are using them in preparing records and reports. My children have brought home report cards with an assortment of checks or plus and minus signs after the following items: willingness to cooperate; respect for authority; assumes responsibility; care of school property; courtesy; works to capacity; works independently; is prompt in getting to work; has work done on time; follows directions; works neatly.

These items are fairly typical of the kinds of personal-social factors on which schools choose to make observations of pupils. They seem to be concerned largely with attitudes. When additions are made, they are usually concerned with interests or with adjustments to peers. Occasionally, there may be mention of unusual performances in special phases of school work which imply that the student has certain aptitudes.

It appears, then, that measurement of personal-social factors is concerned largely with attempts to get observable, important, different, and as complete as possible measures of interests, attitudes, adjustments, and unusual performances.

Not Objective, Not Tests

When speaking of measurement, one usually implies the substitution of "objective" measuring devices for "subjective" teachers' judgments. When this is done, one is heading for the first cul-de-sac in the semantic jungle of measurement. There are no objective instruments. There are only devices that are *objectively scored* with a key. The authors of such instruments had to *choose* which of the 17,953 areas they wanted to cover; *decide* what

1. Allport, G. W., and Odbert, H. S. "Trait Names: Psycho-Lexical Study." *Psychological Monographs*. 1936. Vol. 47, No. 1. p. 171.

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items they would select; *elect* the form of item they would use; *select* their scoring methods; and *make judgments* about the statistical methods they would employ.

These are subjective decisions. When one chooses a so-called objective test of personal factors, he simply substitutes some author's subjective choices for his own. He is not, as commonly believed, substituting "objective" for "subjective" judgments. Would it be better to use terms and areas which teachers in your school have chosen after applying the four criteria rather than accept the subjective opinion of someone who has never seen your school?

There are no *tests* of personality, adjustment, or interest. The devices which are commonly called tests in these areas are simply *questionnaires*, preference *records*, interest *blanks* (properly named!) or guided *interviews*. They have the limitations as well as the merits of such devices, but they should not be considered tests in any sense (unless one accepts the synonym of ordeal). They may be printed in formats similar to tests; they may have "norms"; they may have so-called validity coefficients reported in the manual; and they may be advertised as tests. But they are simply questionnaires or guided interviews. They are not in the same category with achievement and aptitude tests.

A Check Will Not Suffice

The measurement of personal-social factors in an individual is a complicated task. Progress made in this phase of the study of individuals is discouraging, and it appears we are still at such a primitive level that it is hardly possible to dignify our efforts with the word measurement. Nevertheless, we are bombarded constantly by advertising which attempts to assure us that the gold at the end of the rainbow has been found—that valid measures of "personality," interests, attitudes, and adjustment can be had by filling out an order blank and submitting a check or money order. The extent to which educators respond to such exhortations is disturbing! It suggests great psychometric innocence, a naive conception about human beings, mistaken faith in statistics, or anxiety about keeping up with that other fellow who could not resist the hucksters.

These words may seem harsh. They are intended to be so much so that any reader will think at least twice before embarking on an expensive program of giving tests of attitudes, adjustment, interests, or personality with the intent to *use* them in the guidance of pupils. There is no attempt to discourage research in this area, but even if doing research were given as the purpose for using such instruments, one might wonder whether continuation of procedures that have proved so sterile would be worth the effort.

Suitable Standards

The most difficult problem in the measurement of personal-social factors is the development of suitable units, standards, or yardsticks. In measuring achievement, say in arithmetic or science, the tester can work, in part, on the principle that the best score is obtained by the pupil who answers the most questions correctly. This principle, "The more right, the better," is not applicable to the problems of measuring many characteristics grouped under the heading of personal-social factors. What *is* correct social behavior? And is the most of it always desirable? Is it better to turn the other cheek or fight back? Do we want 100 percent respect for authority even if the authority is tyrannical? Is 100 percent assumption of responsibility desirable even if it leads to ulcers, early heart failure, or a nervous child? Do we really want children to work constantly up to 100 percent capacity even if we could measure capacity? Is the top of the scale on *acceptance by peers* or *belongingness* desirable if it means there are so many social invitations that the homework won't be done or the music lesson practiced?

Measurement implies a scale; in the personal-social area, it requires a scale of *values*. Who knows the most valuable amount of any personal-social factor for any particular child? Even if there were a way to measure a child's interests, attitudes, and adjustments without reference to their desirability, one would have to question the wisdom of doing so. Would measurement that did not suggest some next steps in the child's education be of any worth? Would it not simply take up file and cumulative record space that might better be used for other purposes?

Measurement requires the use of our number system which presents some difficult problems. We have no way yet of avoiding the fact that two in our system is twice as much as one, and that half of ten is five. Will the student who scores

ten on the adjustment category be twice as well adjusted as the pupil who scores five? Can a score of five on a measure of *responsibility* and the same score on *interest in the outdoors* mean similar levels if both are average scores for any norm group? Problems in putting our words in the personal-social areas into numerical terms have not been solved, and use of such devious statistical procedures as T scores, standard scores, and percentiles tends to obscure rather than enlighten the interpretations. Until a new number system is invented for measuring personal-social factors, it seems unlikely that we will accomplish the difficult task set for us. Currently, all numbers used to indicate measures of personal-social factors are suspect.

Remaining Problems

Even if these problems were solved, many others would remain. Among those which plague the users of measures of personal-social development, the following are particularly troublesome:

- Responses can be faked deliberately or without awareness by the subject.
- Titles of instruments are simply christenings by their authors. The names given to scores may have little relationship to what is measured.
- The vocabulary that is used may be a source of confusion and misunderstanding.
- The forcing of choices may make the pupils choose between items about which they have neither knowledge nor concern.
- Expressions of great enthusiasms and strong feelings may be limited by objective scoring procedures.
- The self-estimates that the measuring devices employ are likely to be highly invalid.
- Cultural backgrounds of the subjects are given inadequate consideration.
- Pupils are asked to incriminate themselves if certain items are answered truthfully.
- The scores obtained suggest stability of characteristics and encourage thinking about pupils as they have responded at a particular moment, rather than as they may have been or may become.
- The scores discourage search for evidence about a pupil's behavior since they suggest that the instruments have provided the final word in measured form.

The reader may recognize other problems, but perhaps enough have been given to indicate that there seems to be little hope that the measuring devices now available will provide dependable evidence of a pupil's personal-social development.[2]

Until more dependable instruments become available, it would seem desirable to heed these words of one author.[3] "Those who have real professional training will not need a system. Those who lack psychological knowledge will help pupils more effectively by using simple human warmth and interest than by thumbing a handbook of oversimplified recipes." And it would be well to consider that the complexity of individuals is such that the assessment of their personalities and interests cannot yet be done quickly, objectively, or mathematically.

Eventually, but probably not in the reader's lifetime, educational and psychological research may produce highly effective tools for measuring personal-social factors. Until then, we must depend on such time-proven procedures as observations, study of pupil's performances, and interviews.[4] If these devices are sharpened, more reliance can be placed upon them than upon common measurement devices which are of questionable validity, are less personal, and lack the flexibility that the appraisal of personal-social factors requires.

Appraisal of Aptitudes

Analysis of the work that has been done on the appraisal of personal-social factors leads to a pessimistic outlook. There is reason to be more

2. One must not interpret the evidence of high *reliability* reported for some instruments as measures of validity. Such evidence indicates only that the subject responded consistently at the time he took the instrument. It is not evidence that the responses were true indications of his feelings or that he would respond similarly if the instrument were to be administered again.

3. Laurance T. Shaffer in *The Third Mental Measurement Yearbook*. (Edited by O. K. Buros.) New Brunswick, N.J.: Rutgers University Press. 1949. p. 55.

4. Rothney, J. W. M., Danielson, P. J., and Heimann, R. A. *Measurement for Guidance*. New York: Harpers & Bros. 1959. 378 p.

Ahmann, J. Stanley, and Glock, Marvin D. *Evaluating Pupil Growth*. Boston: Allyn and Bacon, 1958.

Allport, G. W. *The Use of Personal Documents in Psychological Science*. Bulletin No. 9. Social Science Research Council, 1942.

Millard, Cecil V., and Rothney J. W. M. *The Elementary School Child: A Book of Cases*. New York: Holt, Dryden, 1948. 660 p.

optimistic in the field of aptitude measurement because one is dealing with what seem to be less complex phenomena. Many of the difficulties in measurement of personal-social factors discussed above do not apply in aptitude measurement and hence the task is simplified. Although there is still much to be learned in this area, it appears that progress is being made.

When most people think of aptitude, they tend to think of "born that way." This appears to be fallacious thinking but it is equally perilous to believe that every pupil can develop a high level of performance in several areas or, indeed, in one specific area. In any testing situation, a pupil's *performance* is measured only on the items or tasks set before him. If the intent is to predict later performance, the test is commonly called an aptitude rather than an achievement or ability test. It is sometimes very difficult to distinguish achievement, ability, and aptitude tests on the basis of the tasks a pupil is required to perform. The chief difference appears to be the christening by the author in terms of his purposes in giving the test.

Since a test measures performance, the pupil must have had some familiarity with the items on it and must have *learned* something about them. He may have started at birth with some potentialities and begun learning immediately. What he learned made it possible for him to learn more, and when he shows that he has learned more in one field than in another, we tend to say that the pupil has more aptitude in that area.

There are no suitable aptitude *tests* for music and art or creative writing. Principals will have to depend on appraisals of pupils' performances in such areas by teachers and experts. Aptitude for such subjects as spelling and mathematics will be determined best by measurement of current performances in those fields, provided there has been adequate opportunity and stimulation to learn.

In speaking about aptitudes for specific occupations, we are concerned with previous performance and with interest in a variety of pertinent activities. For example, in engineering we look for interest in mathematics, for an inclination to tinker with materials, and for concern with the practical as well as the theoretical. It is dangerous to think of occupational aptitudes as if they were single unitary functions. When we speak of high scholastic aptitude, we refer to previous high test performances in many areas of study, strong desire to succeed, willingness to work, and all of the many factors which contribute to successful performance in school or college.

A good aptitude test is any instrument which predicts successfully some type of pupil learning. Any test, regardless of its current label, may be considered a good aptitude test if it predicts later performance. It might be well to drop the distinction between such terms as achievement, ability, readiness, and aptitude tests but it seems unlikely that this will happen soon. We should not, however, think of tests with such labels as essentially different in content or structure. Nor should we think of aptitude tests as devices which measure inherited characteristics as opposed to achievement tests which measure learned performances.

Few tests for use at the elementary school level are labeled aptitude tests. Reviews of those designed for the secondary level and above have not usually been favorable.[5] Donald Super, for example, reviewed the most common batteries and concluded that only two were likely to be useful in guiding students.[6] And he had some reservations about the two.

Aptitude testing as conceived by many people harks back to the days of "the square peg in the square hole" concept of pupil guidance. Now that we know that we have something to do with the shaping of the peg and the shaping of the hole it seems to be a less valuable concept. We shall, of course, continue to be concerned when the pupil shows promise of high achievement in particular areas, but we are becoming less optimistic that we will discover such promise by the administration of aptitude tests. And many have given up the hope that by giving a battery of aptitude tests they will uncover some completely unexpected talents. If that were to happen, we would have been amiss in our obligation to know our pupils well. Aptitude tests may be useful in the process of learning to know our pupils, but they are likely to remain as just one of the many devices used for that purpose.

5. Buros, O. K. *The Fifth Mental Measurements Yearbook*. Highland Park, N.J.: The Gryphone Press, 1959. 1312 p.

6. Super, Donald E. "The Use of Multifactor Test Batteries in Guidance." *The Personnel and Guidance Journal* 36:17-20; September 1957.

MARY HUGHIE SCOTT

"Teacher-made tests are a must! Standardized tests emphasize drill! Who wants to measure drill, drill, drill?"

"Teacher-made tests are void of validity or reliability! They are worthless!"

You listen to the critics as they decry or magnify the merits of classroom tests. Smiling confidently, you answer, "It all depends." The critic hastens to reinforce his argument, whereupon you repeat, "It all depends." Eventually, he is convinced that his theoretical arguments should be checked against actual classroom practices in the elementary school.

So into the Classroom

Mr. Critic visits classroom 21 in School X.

Shu-u! Quiet. A test in progress. Mr. Critic has to see for himself. Over Johnny's shoulder he reads, "Nine-Weeks Arithmetic Test—Time Limit: 30 Minutes." Further down the page Johnny had completed the following calculations in answer to the question, "What is one-third of three-fourths?"

$$\frac{1}{3} \times \frac{3}{4} = 3\left|\frac{3}{12}\right|\frac{1}{4}$$

Elsewhere, he had answered a number of problems, such as "Multiply 12 by 43," using the standard algorism.

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The pattern prevailed throughout the class with each student busily engaged in taking the same test. When time was called, all the papers were promptly turned in to the teacher—all except a few which had been completed during the first ten minutes of the allotted test time. Naturally, it took a while to locate them among the usual desk-top paraphernalia!

As the teacher stacked the papers, she casually answered the critic's whispered question about the purpose of the test. "Well, it's reporting time, and I need to know how the children are doing in arithmetic. I have to put grades on those report cards, you know!"

"Yes," the teacher continued, "I usually grade the standard way. Seventy is a passing mark, above ninety an "A," and so on. Sometimes, of course, I grade on the curve if most of the scores are high and I have to give some low grades, or vice versa."

Bewitched and bewildered, the critic returned to his office and pulled from his desk drawer a partially written manuscript on teacher-made tests. He took a quick glance and immediately applied the "cross-out":

Authorities on testing agree that, generally speaking, teacher-made tests are more valid than other type tests. Since the teacher is in the unique position of knowing the specific objectives, content, organization, and evaluation procedures of her school, her tailor-made test provides the most directly useful information. . . .

"It all depends. . . ." muttered the critic. For example, in classroom 21, the teacher's stated objective, "To measure how the children are doing in arithmetic in order to determine report card grades," did not coincide with the school's stated objective, "To maintain learning through an integrated review and testing program keyed to individual needs."

In the first place, had the arithmetic program been keyed to individual needs, it is not likely that all 30 students would have been taking the same test unless it had been purported to be a preliminary survey or some such similar "exploration." "Exploitation" would perhaps be a more appropriate word since it was assumed in this particular situation that regardless of the fueling, each motor in the room would idle at the same number and type of problems per hour. The teacher had ignored the variety of factors which could affect each child's performance—everything from whether or not he'd had Oatsie's for breakfast to early environmental and hereditary influences.

The school's course of study stated that another objective of the arithmetic program was to make clear the meaning of each computational process. Had this objective been met, the students could have solved many of the arithmetic examples mentally without meticulously writing out the many mechanical steps. Although the children were taking a speed test, not one responded to the question, "What is one-third of three-fourths?" with the simple answer "¼" without writing the usual time-taking computations. Before using abstract algorisms in the multiplication of fractions, each child should have generalized from social, manipulative, and visual experiences that one-third of three of anything is one of that particular thing.

For example, suppose Mrs. Henry B. is serving coffee to her husband and his guest—a top official in an accounting firm where Mr. Henry B. hopes to be employed as a certified public accountant. As husbands will sometimes do on such occasions, he suggests she bring them some of the delicious cake she had served the previous evening.

"Oh, sure," answers Mrs. B., knowing she will have to prepare a quickie icing to camouflage the aging cake from Herkimer's Bakery. She returns to the kitchen to discover that she has only one cup of powdered sugar, whereas the recipe calls for three. "Oh, well," she mutters, "I'll third the recipe and ice only one layer." Whereupon, she dumps the sugar into a bowl and reads from the cookbook, "Add three-fourths cup of milk." "What's one-third of three-fourths?" she grumbles, searching for a pencil.

Now, how do you think Mr. B. felt when his wife rushed into the living room, borrowed his pencil, and proceeded in his guest's presence to scribble the standard algorism while she mumbled, "One-third times three-fourths. One times three equals three. Three times four equals twelve. Reduce to lowest terms. Three will go into three one time. Three will go into twelve four times. One fourth. Oh, sure—I add one-fourth cup of milk."

Had the teacher in classroom 21 constructed a test to measure "How the children are doing in arithmetic," she certainly would have devised a variety of different types of test items designed to measure arithmetic learnings other than the ability to calculate. The number of items of each type would have varied according to the emphasis she had given each kind of learning in teaching that particular group. If four children in the classroom had been working particularly to understand multiplication by a two-digit multiplier, their tests might well have contained such items as the following:

```
 12
×43
---
 36
 48
---
516
```

Look at the multiplication problem to the left. Notice that the second partial product (48) is moved over one place to the left. Below are several explanations of why this is done. One of them reflects an understanding of the process of multiplication better than the others. Place a check (√) beside it.

..... 1. Because our number system consists of digits and each time you multiply you move the partial product one place over toward the left.

..... 2. Because you are multiplying by the 4 and you have to start the partial product under the number by which you are multiplying.

..... 3. Because you are multiplying by the second digit in 43 so you move over to the second space to begin the second partial product.

..... 4. Because you are multiplying by 40 and your second partial product is 48 tens.

Rewriting his original manuscript, Mr. Critic became completely perplexed when he thought

of the teacher's remarks about her method for determining report card grades. Should a child's report card grade be determined by his performance on one paper-and-pencil teacher-made test —and a poorly constructed one at that? Is a grade to be determined simply by its proximity to the perfect 100 mark, irrespective of the many factors which influence achievement? Is it likely that the normal probability curve could apply to so small a group? Should certain children in heterogeneous groups continuously struggle against unfair competition with no chance of winning the prized "A" grade? When the teacher "grades on the curve," and in her array of test scores observes skewness, is her greatest concern kurtosis, halitosis, or hypnosis?

"Well," reasoned Mr. Critic, "I must stop. My thoughts are out of hand!"

On to Another Classroom

Mr. Critic visits classroom 22 in School Y. Testing in progress again. Over Jack's shoulder, Mr. Critic peers at a paper with this appearance:

LEAVING KOREA

The loud cry ~~third~~ through the barracks, "Hit the deck!" would normally be unwelcomed at the unheard of hour of 2:30 A.M., but today was different. The excitement of going home after many months in Korea was not hard to understand. ~~Every one~~ Everyone was . . . .

Jack continued his thoughtful editing of someone else's writing, as the critic turned to see Joe's test paper. It was an entirely different test. For a moment, Mr. Critic thought it was a standardized test. It contained a variety of beautifully constructed multiple-choice, matching, true-false, simple recall, situation, and completion questions; but, no, it could not be a standardized test. After all, the classroom did not have that death-cell atmosphere with the ticking of the watch saying, "Nearer, — Nearer, — Bang!!" Besides, near the bottom of the paper was one of those "gosh awful" terrors, called a "subjective" essay question! The critic could not believe his eyes. Would a "modern" teacher have the courage to use a type of question that was outdated in the late 1800's?

Where was the teacher? He must talk with her. There she was near the door leading into a small adjoining room, reminding a group of children that they must remember to speak in lower tones.

"But why," he asked, "aren't those children also being tested?"

"They will be in a few days," the teacher answered. "They are having an oral review for their oral examination."

"Oral examination? I didn't have one of those until I was a Ph.D. candidate."

"How well I know," nodded the teacher. Whereupon she proceeded to show the critic how an oral examination in the elementary school could test such things as clarity of oral expression and certain thought processes which could not be tested by a paper-and-pencil test. She further entertained him by leading him to a table filled with projects. They had been made by a group of children to test their ability to apply arithmetical understandings about the differentiation between area and perimeter.

"Why the essay question?" she repeated. "Mr. Critic, try giving a well-constructed essay question about the middle of the term to a group of college students who are expecting an objective-type test. You will be amazed how, as a rule, they will be unable to formulate a coherent, logical answer. I don't believe this is due primarily to lack of skill in writing. Instead, I'm inclined to think it is mainly due to lack of knowledge of the subject tested. It seems to me that it requires more thinking power to create an answer than it does to recognize the correct one when it has already been created for you. Furthermore, why should essay questions be discarded simply because they can't be graded objectively? For that matter, objective tests can't be formulated without the use of subjectivity in selecting and writing the items."

Surprised but pleased, Mr. Critic enjoyed his thoughts about classroom 22 in School Y. Certainly, if a class is organized so individuals and small groups of children can progress at different rates and work on matters of special interest, then classroom tests must be designed to measure progress toward these varied objectives. This does not preclude, however, a group test designed for survey and other research purposes.

How good it had been to see the teacher in classroom 22 using means to test writing ability other than naming the parts of a sentence, the parts of speech, and the like! And to see her giving a long test using a variety of objective-type as well as subjective-type questions was a thrill. The teacher's own explanation pleased the critic.

She felt she could get a more valid measure of what the pupils knew by using various types of questions, including essay questions which could not easily be scored by machine. She knew that essay-type questions had been virtually discontinued by professional test constructors for two reasons: 1) because of personal idiosyncrasies among teachers and limitations in many teachers' power to appreciate degrees of merit in a complex performance; and 2) because of the narrowness of the sample of ability which the essay-type question assesses. But in this teacher's estimation, these negative factors did not outweigh the positive reasons for using essay questions. Where could you find a better kind of question for obtaining evidence on the combined abilities to recall, select, organize, and express ideas in written form? Besides, there are ways to evaluate answers to an essay question in a more objective manner. Why not try improving essay questions instead of discarding them?

As Mr. Critic went again to his office, he continued to think of the merits of the many types of teacher-made tests being used to advantage in the elementary school classroom. Glancing at his manuscript on teacher-made tests as he had revised it after returning from the first school, he picked up a pencil and again applied that familiar "cross out":

Teacher-made tests are worthless! It is a known fact that they do not test whether or not the objectives of the school are being attained. Rather, they continuously attempt to compare one child with another primarily for purposes of grading. Rarely are the tests designed for purposes of finding out what to teach. But most ridiculous of all is that teacher-made tests are extremely limited due to lack of validity and reliability. As a means of evaluating, they are extremely crude and . . . .

"It all depends," re-echoed the critic. "It depends primarily upon the specific purposes of the test and whether or not the test was skillfully constructed and used for those purposes." With this conviction, Mr. Critic wrote his final manuscript.

To the Final Manuscript

It was Aristotle who said, "Is it not the mark of an educated man to look for precision in each class of things only so far as the subject admits?" It must be recognized that behavior cannot be measured as accurately as can many other things. Much progress is yet to be made in the measurement of the many areas of behavior, and the measurement of achievement is no exception. This is truly a field for exploration.

But as a new explorer in the field of test construction, it appears logical that first of all the prospective test-maker would review the conclusions which have been drawn relative to evaluation in general:

- Evaluation is done for the purpose of improving a teacher-learning situation.
- Evaluation is done *with* pupils not *to* pupils.
- Evaluation is employed primarily to measure knowledge, skills, and attitudes.
- Evaluation should be continuous—providing motion pictures of a child's behavior rather than snap shots.
- The *how* to evaluate is determined primarily by *what* is to be evaluated.

Thinking of the total measurement program, it appears that many standardized tests are designed primarily to measure long-range goals. This places an added responsibility on teacher-made tests—that of measuring short-term goals.

The teacher uses a variety of devices to measure progress toward certain goals. Among these are:

observations	self-evaluations
interviews	essays, themes, poems
anecdotal records	parent conferences
samples of work	recordings
construction projects	standardized tests
discussions	projective techniques
reports	rating scales, checklists
oral tests	open book tests
survey tests	teacher-made tests
readiness tests	pupil-made tests
questionnaires	case studies
inventories	cumulative records
autobiographies	dramatizations
logs, diaries	diagnostic tests

The literature is voluminous in its explanations of the purposes and construction of these instruments.[1] Since teachers, however, appear to be particularly interested in improving the construction of paper-and-pencil-type achievement tests, a few simple guidelines are briefly summarized below.

Constructing a paper-and-pencil test: These

1. Valuable discussion about the construction of teacher-made tests will be found in the following:
Burr, James B., Harding, Lowry W., and Jacobs, Leland B. *Student Teaching in the Elementary School.*

are some of the basic steps to take in constructing a paper-and-pencil test:

1. Have well in mind the goal toward which the teaching is directed. Is its purpose to teach facts? To teach how to use facts? To improve attitudes? To improve study skills? Or is its purpose a combination of two or more of these goals?

2. List the specific objectives of the test and indicate the relative importance of each.

3. Devise a written plan for the test that will parallel the emphasis placed on each objective. If understanding the *why* of the formula for finding the area of a triangle has, at the particular time, priority over the *how* of the mechanical computations, the number of test items relative to the *why* should indicate this priority, as should the scoring procedures.

4. Make the test as long as is consistent with the purposes, the interest span of the child, and the time available for taking the test.

5. Arrange the test items in a manner which will encourage accuracy in reading and thinking.

6. Provide the necessary instructions and physical and emotional atmosphere for properly administering the test.

7. Formulate each test item, whether it be essay or objective, according to rules for test item construction.

The essay-type question: The primary purposes of essay questions are to appraise the student's ability to describe, explain, and compare; to apply information to various problems; to stimulate a high level of reasoning; to cover thoroughly a limited area of content; and to put in written form the combined abilities of recollection, selection, organization, and expression.

To increase the effectiveness of the essay question: 1) use it for those purposes for which it is best adapted; 2) state the question so the amount of discussion has a stopping point (this may require a greater number of questions with shorter answers); 3) decide at the time of preparing each question some of the possible responses that could appropriately be made; 4) avoid using numerical grades; 5) write comments to help pupils see their strengths and weaknesses; 6) do not generalize that any one test is a true indicator of the degree toward which an objective has been met.

The objective-type question: The primary purposes of objective-type questions are to appraise the ability of the pupil to recall a one-word or one-phrase answer; to discriminate between several possible answers; to associate ideas and recognize relationships; and to sample a wide range of student responses in a short period of time.

To increase the effectiveness of the objective question: 1) use many questions but provide adequate time for answering; 2) be careful in wording to keep ambiguities and "giveaways" to a minimum; 3) avoid the use of distractors or trick statements; 4) avoid lifting exact statements from textbooks; 5) avoid specific determiners, such as strongly stated phrases containing the words "always," "all," or "none"; 6) try to avoid using expressions that have different meanings for different children; 7) avoid unfamiliar, literary, figurative, or long statements; 8) make all of the possible answers, when options are given, about the same length and grammatically consistent with the "stem" of the sentence; 9) increase the similarity in possible answers when testing the power of discrimination; 10) do not assume that the objective test is truly objective or valid. The degree to which it meets either criterion depends upon the purpose for which it is used and how it is used.

And To Be Perfectly Frank

. . . Mr. Critic suddenly stopped writing, realizing that in order to cover adequately the subject of teacher-made tests he would have to write books. He then ended the manuscript by stating bluntly:

"If practically all the reader or writer knows about teacher-made tests is included in this article, then neither knows enough to be effective in the important area of testing in the elementary school!"

2nd ed. New York: Appleton-Century-Crofts, Inc. 1958. 459 p.

Garrison, Karl C., and Gray, J. Stanley. *Educational Psychology*. New York: Appleton-Century-Crofts, Inc. 1955. 505 p.

Greene, Harry A., Jorgensen, Albert N., and Gerberich, J. Raymond. *Measurement and Evaluation in the Elementary School*. 2nd ed. New York: Longmans, Green and Company. 1953.

Pressey, Sidney L., Robinson, Francis P., and Horrocks, John E. *Psychology in Education*. New York: Harper and Brothers. 1959. 658 p.

Ross, C. C., and Stanley, Julian C. *Measurement in Today's Schools*. 3rd ed. Englewood Cliffs, N. J.: Prentice-Hall, Inc. 1954. 458 p.

Thorndike, Robert L., and Hagen, Elizabeth P. *Measurement and Evaluation in Psychology and Education*. New York: John Wiley and Sons. 1955. 575 p.

If you're interested in—

• PROVISIONS FOR GIFTED PUPILS

One of the major aims of educators in this country is to provide for the individual differences which exist among all children.

In the DESP's recent publication *Elementary Education and the Academically Talented Pupil*, there is a passage which reads: "Provisions for able children should never become a substitute for quality education for all or a device for rescuing those with special talents from a program which is not good for anyone. Provision for the academically talented must grow out of a good program for all children. It is a never-ending process of improved teaching and learning."

Since the topic of gifted children is so widely discussed, the NEA Research Division made a factual survey on provisions for gifted pupils.[1] They conducted a study in the elementary, junior and senior high schools throughout the country.

The survey questionnaire, which asked if the school districts were selecting gifted pupils and how they were providing these children with specialized learning experiences, was sent to a selected group of 1495 urban school districts. Replies were received from 875. These were then tallied by population groups and weighted to provide a national average of all school districts.

Differences by size school districts: There is a substantial variation among different size school districts in the extent to which they make special provisions for gifted children. The survey denoted a definite trend towards more programs for the gifted in those districts having the largest population. The smaller the district, the less likely it is that there will be some kind of specialized learning experience. All of the districts reporting in the 500,000 or more population group make provision for the gifted in the elementary schools, while in the 2,500-4,999 population group only a little more than half make any special provision.

Provisions made at grade level: Throughout the country, the survey indicated that more junior and senior high schools provide programs than do elementary schools.

Generally speaking, about 77 percent of urban school districts make some provision for the gifted in the junior and senior high schools as compared to 70 percent in the elementary grades.

Ways of providing specialized learning: There are three techniques—separate classes, acceleration, and enrichment—which are generally employed throughout the country to provide specialized learning experiences for gifted pupils.

Separate classes are found more frequently in junior and senior high schools than in elementary schools. This organizational device is used in better than 40 percent of the junior and senior high schools, but in only 14 percent of the elementary schools. Acceleration is used least frequently, ranging from 18 percent of the elementary schools to 24 percent of the junior high schools. As might be surmised, enrichment in regular classes was by far the most frequently reported type of provision. In all three grade levels, at least 60 percent of the school districts reported this method. In the smaller school districts, enrichment is used almost to the exclusion of the other two techniques because low pupil enrollments tend to make separate classes generally impractical.

For the benefit of those who wish to examine in detail the current provisions for gifted children in the elementary grades, the table on the next page provides specific data.

1. National Education Association, Research Division, *Provisions for Gifted Pupils*. Research Memo 1960-50. Washington, D. C.: the Association, December 1960.

PERCENTAGE DISTRIBUTION OF 792 URBAN SCHOOL DISTRICTS MAKING VARIOUS PROVISIONS FOR SPECIALIZED LEARNING EXPERIENCES FOR GIFTED PUPILS IN ELEMENTARY GRADES, 1958-59

Provision for specialized experiences	Population of school districts						All districts (weighted estimates) [a]	
	500,000 and over	100,000-499,999	30,000-99,999	10,000-29,999	5,000-9,999	2,500-4,999	Number	Percent
Enrichment only	15.4%	38.3%	43.4%	42.7%	43.8%	35.6%	1,513	41.7%
Separate classes only	7.7	3.9	3.6	2.4	1.6	—	75	2.1
Acceleration only	—	—	1.2	2.4	1.6	4.4	81	2.2
Enrichment, separate classes, and acceleration	38.4	10.8	9.0	4.9	—	—	134	3.7
Separate classes and acceleration	—	—	0.3	0.6	0.9	—	18	0.5
Enrichment and separate classes	23.1	17.6	9.6	8.6	5.8	4.4	278	7.7
Enrichment and acceleration	15.4	17.6	18.2	14.6	9.1	2.2	423	11.6
Total	**100.0%**	**88.2%**	**85.3%**	**76.2%**	**62.8%**	**46.6%**	**2,522**	**69.5%**

[a] Totals in column 8 are weighted estimates derived by applying the figures in columns 2-7 to the total number of urban school districts which have elementary grades.

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Children remember what they discover. The more they discover, the more they remember. The Discovery Edition of the *Growth in Arithmetic* series makes arithmetic a lasting experience for children. The entire series for grades 1-8 will be officially published in 1962. The books for grade 1 are available now for examination. The other books and their supplements will be available during the next few months.

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Effective Learning and Healthy Personality

BARBARA BIBER

This is the first in a series of articles on learning and the development of a healthy personality. Each succeeding issue of The National Elementary Principal *for the current school year will carry an article on one aspect of this topic. Plans call for later articles to discuss teacher personality and its relation to the instructional program; the teacher as a selector of content; the child and home and school; the first year in school; and freedom and control in classroom management.*

All of these articles are being prepared by leading educators, psychologists, sociologists, and anthropologists who are participating in the research program at Bank Street College of Education in New York City.

WITH the educational atmosphere so full of controversy these days, it may be refreshing to remind ourselves that principals, teachers, and parents have basically common goals for growing children.

We want them to become informed, clear-thinking people with developed skills and capacities, ready to take a functionally useful place in the increasingly complex social scene of our era. The goal, therefore, is effective learning to take place in school, not the transmission of static information.

Barbara Biber is Director of Research, Bank Street College of Education, New York, New York.

We also want children to utilize their powers fully and freely, in ways that are possible only for people whose abilities are not corroded by distrust of themselves or others, and to find satisfaction and happiness in mature love and work relationships. Here, the goal is healthy personality.

Personality Development—Whose Concern?

Difference of opinion arises as soon as the extent of the school's responsibility is questioned with respect to these accepted goals. There is a point of view which considers healthy personality a new-fashioned term for old-fashioned "character development," and regards this aspect of learning and growth to be the special prerogative of home and church. From this view, involvement of school people in questions of personality has a certain aggrandizing quality, as though the influence of family were thereby weakened and diminished. At the extreme, a quality of anxiety enters in, a fear that our children are about to be "nationalized," that the school as a social institution is invading the basic rights of parents to rear their children according to their individual values and ideals.

Something more than division of responsibility and prerogative is involved in the position that schools should concern themselves only with the acquisition of knowledge and skill in intellectual functioning. Implicit in this position, it seems, is a theory that the educational power of the school

as a force for growth of children is fixed in amount, so that concern and investment in healthy personality development must necessarily deplete resources for an effective program in learning. This, basically, is a numerical concept of the learning process.

Yet, if we take at all seriously the contributions of the behavioral sciences during the last few decades, such a concept is not only scientifically untenable, but also inadequate as the foundation for educational practice at any stage of maturity. Learning, we have begun to understand, is a dynamic process. There is no basis for assuming that what we consider limits of intellectual capacity are true limits or, more seriously, for assuming that presentday teaching maximizes each individual's power to learn. Gardner Murphy's interesting book, *Human Potentialities,* provides a scholarly critique of our own narrow, contemporary vision and may stimulate new ideas on this subject.

A dynamic concept of learning overrides earlier tendencies to compartmentalize development into learning and personality development, as though one could be insulated from the other and each could be parcelled out to the separate aegis of school or home. In the growing child, these processes interact continuously with each other; they cannot be assigned separate orbits of responsibility; they can be given neither separate clock hours in the school day, nor separate chapters in the curriculum outline. Influence on personality formation has always been intrinsic to the experience of learning. We have not, however, been aware until relatively recently of the complex processes involved, nor have we been in a position to utilize new knowledge for the realization of contemporary educational goals.

A Circular Relation

We come, then, to the position that we cannot develop the mind of the child without *ipso facto* influencing his emotional status, his attitudes and feeling toward himself, his interest in and connection with his environment—in other words, his personality development. This is not a matter of choice, decision, referendum, or argument. It is inevitably part of becoming knowledgeable and competent. As school people, our responsibility for healthy personality development in the children we teach is a basic aspect of our responsibility to stimulate effective learning.

Despite the challenge this represents in terms of manpower, resources, imaginativeness, and flexibility, there is an overwhelming advantage as well, which often goes unrecognized. Healthy personality supports effective learning which, in turn, contributes to healthy personality. It is this circular process which represents our greatest hope for increasing the learning power of children and would expose the false concept of a fixed numerical economy of the school's potential contribution to optimal growth in childhood. If we can enlist the full power of positive emotional forces in the learning processes, entirely new horizons of intellectual capacities may be opened for us.

Through a Dual Lens

As a way of making these ideas more concrete, it may be interesting to take a binocular view of a few contemporary goals and methods in the field of elementary education, with an educational lens on one side and a psychological lens on the other. For the sake of clarity, four educational goals and the methods by which they are implemented appear below. The paragraphs in italics represent the psychological perception of the implicit processes involved.

GOAL 1. To give children direct experience with the processes of acquiring knowledge.

This involves extending the range and depth of experiences to which the children are exposed, providing a variety of materials to do or make things with, having lots of different kinds of books from which to read or be read to, bringing people with special skills or cultural backgrounds into the classroom, taking the children out into their communities to watch the building being constructed, to visit the dairy farm or the traffic control tower, to listen to the sounds and signals of the boats on the river.

Exposure needs guidance if it is to lead to more acute observation. It becomes the teacher's task to stimulate comparisons, to accent contrasts, and above all to be receptive to the children's responses to experience on many levels—feelings or ideas, perplexities or logical inquiry.

Children need challenge and opportunity to work through some unfinished business of the mind—anything from finding out why some plants need different soil from others to working out an

answer to why the cross-country train routes and automobile thruways are where they are. Opportunity to explore and make independent discoveries needs guidance from the teacher, who will make sensible decisions about what can be discovered by the child on his own initiative, and what can and should be taken from authoritative sources.

Observation, questioning, exploring, discovering; these are the ways of partaking in the search for knowledge (clearly in contrast, as an educational goal, to a passive acquisition of knowledge which is, after all, the end product of other people's intellectual search). Learning becomes, by these methods, a solid and earnest intellectual process.

Wider and deeper exposure is not exclusively an intellectual experience; it resounds on emotional levels. For example, when in the presence of powerful machinery at work, one's own feelings of strength can be deepened, just as love and protectiveness can be reinforced in the presence of the new-born calf. To find solutions, to gain insight independently, is a primary form of nourishment to the child's sense of strength as an individual. When nourished in this way, there is reason to believe that alternate forms of seeking power, such as through embattled resistance to adult authority, may be less prominent and potent. Furthermore, to experience and accept the fact that the opportunity to try things out for one's self cannot be unbounded, but needs to be balanced by accepting a suitable measure of direction and guidance, is a useful contribution to finding a sound balance between dependence and independence in all life situations.

GOAL 2. To help children become competent through mastering skills and techniques—the disciplined aspects of learning.

If one cuts through the elaborate variations of method which have developed in this field, two appear as most significant: first, to invest the skill subjects with maximum meaning for the children, especially at the early stages, and second, to establish these skills as basic necessary tools for exciting new intellectual ventures. The focus is on keeping alive the child's primary curiosity to penetrate the unknown; the challenge is to keep him motivated while he goes through the sometimes arduous processes of "tooling up."

The child's progress along the way must be evaluated. Achievement is a reckoning; fortunately, nowadays, it is increasingly a reckoning of the child in terms of himself, and less a competitive race for the symbols of superiority and the power and privileges attached thereto.

Competence and mastery are obviously highly desirable for the growing self. To feel in control of the symbol systems on which our society depends adds immeasurably to the child's feeling of his own worth. The newspaper he can read by himself grounds his naturally conflicting feelings: to be and do everything his father is and does and, at the same time, to be more and more a person in his own right. He knows himself more and more realistically in terms of what he can do; he is learning that what was once unknown can become known and that he can expect to play a part, again and again, in that transformation.

GOAL 3: To develop increasingly independent powers of thinking, reasoning, and judging.

The discussion period, in contrast to "recitation," is developing as one technique by which to make the shift from amount of knowledge as a central purpose to the far more complex goal of helping children perceive and deal with the meaningful relationships within bodies of facts. The fact is the brick; there is no edifice of thought or understanding until the facts become part of ideas and concepts. The children are stimulated and guided to compare and contrast, to search out similarities and differences, to try to understand cause and effect, to consider what is evidence and proof, opinion and fact. They are, in short, stimulated to become skilled in a "why and wherefore" approach to learning, to enjoy it, and to realize that when questions become complex, there are no pat answers, that no teacher has them ready-made or in the back of a textbook.

This approach is not restricted to the orbit of logic and reasoning; it leads to providing suitable opportunity for children to express preferences, engage in decisions, observe consequences, and revise judgments. An interesting elaboration of this idea is presented in Jerome S. Bruner's book *The Process of Education.*

There are major forces, operating at unconscious levels, diminishing each individual's capacity to see himself and his life situation objectively and rationally, which cannot be simply and

directly counteracted by excellence in ability to generalize and reason. There is no one-to-one relation between skill in solving a problem in physics and adeptness in dealing with sibling problems in one's family. Yet, the experience of dealing objectively and rationally with the learning content of school life, developing a sense of respect for what is involved in arriving at the truth on any plane, supports an attitude and an ideal of striving for objectivity in all life relationships. At the least, the children thus educated are less likely to accept submissively other people's judgments. They tend to respond enthusiastically to opportunities of thinking things through for themselves, given the facts.

GOAL 4. To accent the worth of the individual and the value of individuality.

To know the children as individuals, to be aware of their family backgrounds and out-of-school lives, to arrange programs so as to accommodate various rates of learning, to provide an assortment of learning experiences in response to different interests—these are only a sample of the numerous ways in which the modern school takes account of individual differences and needs. The teacher's purview of the class as a conglomerate entity has given way to a concept of the class as a social assembly of individuals to be separately perceived and with whom it is desirable to engage in differentiated interactions.

From quite a different perspective, one recognizes the value being placed on individuality wherever forms of expression, verbal and nonverbal, are guided away from stereotypy, where children are helped and encouraged to utilize their own personal ways of seeing and feeling in re-organizing and re-expressing their experiences. Thus, the creative activities of the schoolroom move closer to the genre of the arts.

Being known and responded to as an individual accents the child's sense of his own worth; feeling his own worth as a person becomes the foundation, psychologically, for responding to and accepting others as individuals. This is one of the few guarantees we know against the social faults of prejudice and discrimination. Being encouraged to preserve the essence of his own meanings, while he adapts to the forms and structures of the available medium, supports the child in related aspects of personality development: how to adapt without overadapting, how to recognize himself as a source of creative enjoyment, armed against boredom and being cast forever as a member of a passive audience.

These illustrations, though incomplete as a roster of educational goals, may suffice to clarify the concept of the circular relation between effective learning and healthy personality. Any ambition to be comprehensive would require a similar analysis of other goals: strengthening communication among children and between children and teachers, reconstructing the child's image of authority through a teacher who both supports and controls, bringing about a climate for learning which maximizes the children's involvement, and so forth. In all these instances, as previously stated, inseparable personality processes are involved. In addition, the circle is closed because the personality processes feed back into the effectiveness of learning.

In Terms of the Principal

So far, only passing reference has been made to the problems to be faced in running and operating schools in terms of these goals and their implications. Obviously, in many ways, responsibility reverts to the teacher training institutions. Equally, the challenge comes to rest with the principals.

The papers to follow in this series will deal with questions at the level of principals' concern and involvement, such as taking personality factors into account in the selection of teachers, the limits and possibilities of integrating the home and school lives of the children, and so on. The presentations draw both on findings from research[1] and on insights from experience in the field. A common point of view pervades the series: There is more potential for learning than we have so far been able to bring to fulfillment; an integrated approach to learning and personality should make it possible to maximize this potential.

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1. Following is a list of some of the research studies currently in progress at Bank Street College of Education. These studies are supported in major part by the National Institutes of Mental Health, grant #3M-9135 and #M-1075, and by several private foundations. The Psychological Impact of School Experience: fourth grade level; Study of School Entry: kindergarten level; Study of Classroom Processes: second and fifth grade levels; Teacher Personality Study: selection and performance; Study of Parent-Teacher Communication: elementary school level; Study of the Elementary School as a Social Institution.

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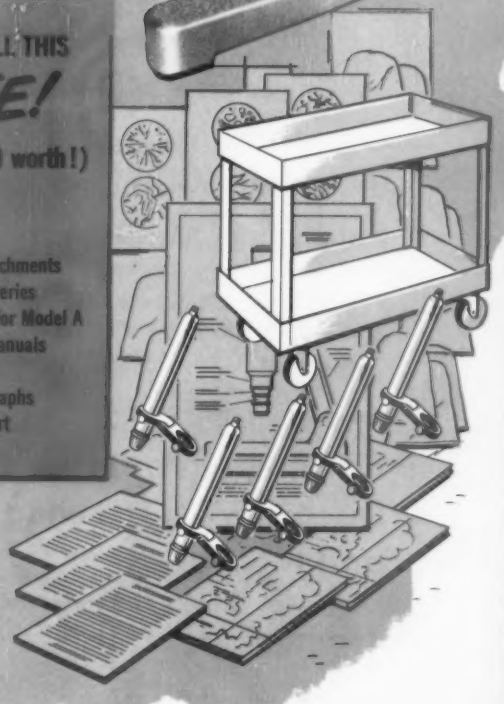

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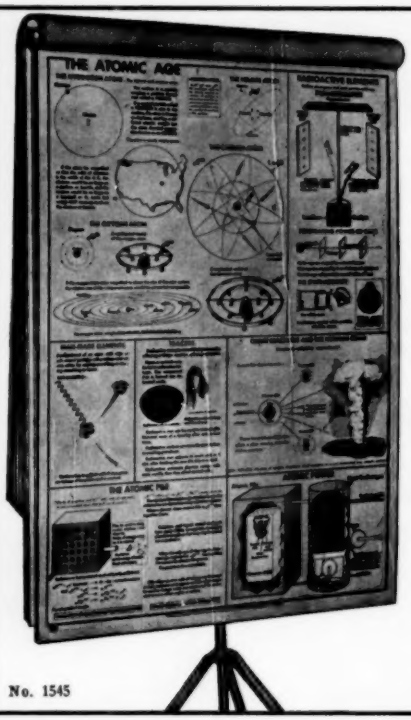

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WANTED
Better Communication Between Home and School

Words are meeting points at which regions of experience come together.

I. A. Richards

DONALD L. BARNES and JEAN SLAUGHTER

IN recent years, professional publications and popular journals have been filled with articles—pro and con—regarding the quality of American education. Some writers have contended that these outbursts of criticism represent the rumblings of a small, vocal minority; others maintain that these statements reflect the thoughts of a great majority of our citizens. Basically, these rumblings serve as a social barometer—telling us how well we are communicating with our public—parents of the boys and girls who are attending our schools.

There seems to be little disagreement with the suggestion that the best interests of children are served when the home and the school are working harmoniously towards common goals. When the home and the school are pulling in opposite directions, the task of the teacher is greatly increased and frustrations become an unwelcome daily diet.

In an attempt to discover how parents and teachers view the contributions of kindergarten programs to the total school experience, over 100 parents and a somewhat smaller number of teachers were asked to respond to six questions. Care was taken to get a representative sampling of teachers at various grade levels and parents from a variety of socio-economic strata.

Responses from these two groups indicate that much needs to be done to reach common understandings regarding the function and the purpose of kindergarten. Below are the statements to which the teachers and parents reacted and the results of the survey.

- Children usually enjoy kindergarten, but the program itself has little to do with future success in school.

Teachers	*Parents*
100% no	56% no
0% undecided	4% undecided
0% yes	40% yes

- The personal development of the child (his habits, etc.) should be left to the parents. The kindergarten should help him with his mental development only.

Teachers	*Parents*
100% no	58% no
0% undecided	6% undecided
0% yes	36% yes

- Too many kindergarten children are encouraged to mess with paints and other materials before they are really ready for such activities.

Teachers	*Parents*
92% no	78% no
0% undecided	6% undecided
8% yes	16% yes

- A child should never be held back in kindergarten, as there is not enough genuinely academic work to justify such a decision.

Teachers	*Parents*
88% no	36% no
0% undecided	8% undecided
12% yes	56% yes

- The kindergarten teacher's job is to try to help the children develop at approximately the same rate—not to encourage the faster ones to move far ahead of the rest.

Teachers	*Parents*
100% no	48% no
0% undecided	4% undecided
0% yes	48% yes

Donald L. Barnes is Associate Professor of Education, Ball State Teachers College, Muncie, Indiana. Jean Slaughter is a kindergarten teacher, Stevenson School, Muncie, Indiana.

- Kindergarten teachers should not be required to have as much training as other teachers, as the difficulty of the work at the kindergarten level does not require it.

Teachers	*Parents*
100% no	86% no
0% undecided	4% undecided
0% yes	10% yes

Regardless of whether we personally believe these particular statements should be answered with a *yes* or a *no*, we can hardly overlook the fact that this group of teachers and parents disagreed rather consistently in their responses. If these are at all typical of answers we might secure from other groups of parents and teachers, there seems to be a definite need for better communication between the home and the school.

There are various ways in which the home and school may communicate. Some of the essential ones are PTA meetings, individual conferences, popular publications, and school and home visitations. But however we go about it, we must try to keep these communication channels open and functioning effectively!

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Still Groping in Grouping?

THOMAS SCHOTTMAN

THE educational horizon seems ablaze with attempts to solve the problem of educating all children to the extent of their abilities through administrative grouping. I use the term "administrative grouping" to differentiate from the vast variety of invaluable grouping procedures used by teachers within a heterogeneous class. Do we need this kind of grouping to achieve the most effective education for all boys and girls? We constantly hear negative and affirmative answers to this question. I think many are still groping for an answer that will serve our staff and our children.

This article explains two types of administrative grouping in the Skaneateles Elementary School. After reading and attending conferences, I believe the first approach is not so common, but has served us well and may be valuable to others. The second approach is more common and controversial.

At Skaneateles, we group all the children heterogeneously within a grade. Some modification of this has been made by pre-grouping the children who, on the basis of their standardized reading scores and the judgments of their teachers, should use instructional reading material below that used by an average child of their grade level. The child's specific reading problem is also considered.

These children have been divided into groups of seven or twelve pupils who have fairly similar reading needs. In the five classes in each grade, each class usually receives one such group. This results in the slower reading group of a typical classroom being more uniform. There were two main objectives: 1) To insure that children would be given reading material at their instructional level, and 2) to increase the efficiency of the teacher by narrowing the number of instructional reading levels in her class.

Thomas Schottman is Elementary Curriculum Coordinator, Burnt Hills-Ballston Lake Central Schools, Burnt Hills, New York. At the time of writing this article, he was Principal, Skaneateles Elementary School, Skaneateles, New York.

The percentage of children being pre-grouped varies from grade to grade but usually involves only about a fourth of the pupils at each grade level. Thus, the primary grades have three reading groups and the intermediate grades have two in each classroom. Because of the uniformity of the slower group, the teaching is more efficient and satisfying to the teacher and the children work with material in which they learn best.

We have pre-grouped another group of youngsters at the other extreme which involves a much smaller percentage since it is limited to 12 children. These are rapid learners and read far above the grade level. They receive instruction in reading material which is not used by any other group in our school and is at a level one year higher than their grade. We know the adjustment for this group does not solve the problem of other rapid readers and superior pupils. However, these pupils still receive an enriched program with much supplementary reading and purposeful library reading.

I would like to stress the role of the teacher in the selection of these groups. Tentative placement lists are made by the teachers before spring testing. After the tests are given, each teacher meets with the reading teacher to make definite recommendations. In this way, we use the knowledge of the child which the teacher has acquired in working with him for a year and make adjustments in the fall if a child's situation has changed.

The pre-grouping of the extremes in reading has been in process for five years and the faculty thinks the time and effort is worthwhile. They feel they are doing a better job, and it is substantiated by the achievement of the children. Many outgrow a need for being pre-grouped in one, two, or three years, and the groups are smaller in the upper grades. The detailed coordination of the program places the principal in a good position to provide extra guidance for pupils who are having problems in this area. The services of a remedial reading teacher and a school psychologist are available

when necessary. In our school, with 33 classroom teachers, there is the advantage of providing a very tangible example of working together in designing a curriculum which meets the pupils' needs. The teachers have more understanding of the work the preceding teacher has accomplished.

The second type of grouping is now used only in our third grades. The children work for 50 minutes a day in a reading group with a large number of other children at a similar instructional level. This means many of the children change their rooms. Five years ago we had a similar plan in the third and fourth grades. It was dropped at the end of a year in the fourth, but continued on for another year in the third grade. One year, we didn't have the grouping in any grade. Why did we drop it in the third and fourth grades? Why did we return to this grouping in the third grade? A brief answer will indicate some of the problems.

Observation and test results have shown that sending children into different rooms for reading does not, in general, result in a program which is superior in range and depth of activities or in the development of skills beyond those resulting from a good reading program conducted in one room. There are several important disadvantages.

One of the biggest disadvantages is that it creates special staffing problems. The teacher working with a slow group not only must be willing, but must have the skill and energy to work with a large group with reading problems. Although this class is set up to be the smallest, it has some 25 children. The range of reading levels is great and the variety of problems tremendous. It requires much grouping within the class and a great amount of skillful preparation to deal effectively with these children. A teacher who finds satisfaction working with those who have reading problems and has the patience and organization skill to make the job a success is needed.

The teacher at the other extreme, working with rapid readers, has a large class with a great range of instructional levels. If she is not going to sit back and enjoy their fast pace through an average program, she must have a lot of skill and imagination. For teachers of the middle groups, it is important to avoid a program centered solely on a text and workbook approach because of time limits and unfamiliarity with the children.

A teacher turnover made us drop the special program in our fourth grade. It would have been unwise to put an inexperienced or unknown new teacher in one of the difficult groups, and the teacher of the slower readers was too weary to face another year. The third grade continued for one more year, but trying to find a teacher for the slow group, having two teachers mark the report cards, losing opportunities to relate reading to other areas, and changing the staff caused the teachers to drop it.

But the next year, the third grade asked to try it again. Since our third-grade teachers are extremely able, hardworking, and have spent much time removing the disadvantages of this grouping, we now have the program in the third grade. They have improved this grouping through: use of a diagnostic test in the fall; discussion of all borderline cases before placement; provision for a monthly meeting to discuss plans and possible changes in placement; conferring on all marks for report cards; use of grouping within *all* the reading classes; and a continuation of the rich and varied type of reading programs in the regular classrooms. This requires much extra work and close cooperation and its success depends upon your staff.

Another important point is that we had *five* third grades. This meant we could achieve a much greater similarity of reading levels within one of these groups than if you had only two or three classes at a grade level.

In a progress report, these teachers listed some advantages of the arrangement: more time per group for reading; chance for further grouping within the given instructional level; a more enriched program with guided library reading, research, drama, poetry, and constructive activities; great gains for the low group in terms of self-confidence and a more relaxed attitude toward reading; and the enthusiasm and satisfaction of the teachers.

Administrative grouping can play a part in creating an organization that allows the teaching talent of a staff to operate at an optimum level. But our experience reveals that no organization per se will make up for a lack of knowledge of the reading process and skills to teach children who are at various levels of this process. Our greatest emphasis should not be on the way in which children are administratively grouped but on how they are taught in their groups. This is the path to quality education!

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WHITHER EDUCATION?

Annual reports of organizations such as the Department of Elementary School Principals are generally factual statements on conferences, committee activities, special services, financial statements, and the like. These reports, which are essential for record purposes, unfortunately often exclude the most important functions and interests of the organization.

In view of the usual weaknesses of annual reports, including this one, I wish to comment on some of the events in elementary education and in the elementary school principalship during the past year as witnessed by your Executive Secretary.

The concerns of elementary school principals were numerous, and their efforts to achieve were conspicuous. The important issues of the day with which they were confronted were: What shall we teach young children? When should we teach various aspects of curriculum content? How shall the school be organized for the best possible instruction? How shall we pay for good schools? These questions are as old as the public school, but the answers are creating new and vigorous controversies. Pressures and new emphases in our present elementary education are demanding a reassessment of our goals—a look at the values we pride in our American life.

Today, we are challenged to think more carefully and deeply than ever before about the kind of experiences the school should provide for young children. What competencies for living are needed for the decade ahead? What are the real fundamentals? It is not easy to decide these issues.

Uncertainties about the answers to these urgent problems are a healthy sign, but decisions have to be made. Children can not wait for us to ponder indefinitely over educational experiences which we believe they should have. We are faced with the real problem of developing guidelines which will help us make good decisions about our school programs from day to day. As elementary school principals, it is important that we keep before us our sphere of operation and influence. This, of course, differs from school system to school system depending on the size, the resources available, and traditions.

In a period of strong pressures from the public and our fellow educators, one of the major considerations of the elementary school principal is how best to operate. He must have convictions but be open-minded and willing to examine all new ideas. Yet only after careful deliberation should he accept new patterns of operation. Change for the sake of change is not wisdom.

We are living in a period of rush—rush—rush. Let us be certain that we are not deflected from our path and that our efforts to improve the school program are based on research, rich experience, and excellent judgment.

Robert W Eaves

WHAT I SAW

The year is June 1960 to June 1961. In the beginning, national political conventions, campaigns, and elections dominate the limelight and, as never before, education comes to the fore confronting the American people as a major issue. Public concern runs high. Educators continue in their zeal to help all children learn more content, much more effectively, and more rapidly than ever before. Schools everywhere are prodded to redouble their efforts and accelerate their pace. The atmosphere is one of a breathless race and many feel that democracy and life itself are at stake.

Amid this flurry, the most impressive sight to me in my travels is the staunch dedication of the elementary school principal to attain the best education possible for youth. He knows the design must be built continuously upon how children grow and develop. Combined with this goal is his determination to achieve the highest order of professionalization for himself. Repeated comments from those outside our ranks, observing us at work, confirm that this impression is widely shared.

Look with me at the significant areas I found dominating your activities locally, regionally, and nationally.

Intensive study of cultures and international relationship: Did you increase your understanding of the school's role in the larger perspective of the world's problems?

Mass media—tool or weapon: Did you consider ways of fortifying students with additional skills of understanding and discrimination?

Expanded personnel services for elementary school pupils: Have you launched upon finding ways to broaden the base of a positive related program of guidance and health and diagnostic appraisal during children's formative years?

Experimental approach to school organization: Were you scrutinizing the organization of your school and its responsiveness to the increased knowledge of child growth and development?

Continuing study of curriculum content and design: Were you sharpening your procedures for deciding what is most valuable and when it is most appropriate?

Utilizing technology in advancing the school's program: Were you among those trying to find which aspects of technical "know-how" and which machines will enhance educational opportunities for children?

Strengthening and unifying preparation for the elementary principalship: What commitments did your group make to help delineate the aspects of adequate preparation for the principalship?

Our Executive Secretary and our most exceptional office staff have struggled tirelessly to help us as we attempt to solve these and other consuming problems. Our determination to better our best will carry us forward.

May I take this opportunity to thank each of you for the great inspirations you have given and for the abiding confidence in future accomplishments of the principals of elementary schools.

Roberta S. Barnes

HIGHLIGHTS of the year

1961 DESP Annual Meeting

THE 1961 Annual Meeting of the Department was held in Atlantic City, New Jersey, the site of the first DESP Annual Meeting (February 1953) to be held during the school year rather than in conjunction with the summer NEA meeting.

With a record attendance and a dynamic theme, "Contemporary Issues in Elementary Education," which was also the title of a recent publication of the Educational Policies Commission, NEA-AASA, the convention, held March 18-22, gave DESP members an opportunity to explore realities of society, realities of learning, and realities of practice which are three major topics discussed in the booklet. Each area was explored in many ways, such as the dramatic color slide presentation which dealt with realities of society and realities of learning.

Small assemblies on realities of society and realities of learning followed the filmstrip. These speeches by social scientists and behavioral scientists with educational analysts were presented each morning. After this, small group meetings were held to discuss the morning lectures.

One of the most significant features of the conference was a series of demonstrations which featured, among other things, teaching machines, instructional television, and team teaching.

Considerable applause went to the educational consultant centers, and it's expected they will be carried on in future annual meetings.

Another highlight of the program was the principal-to-superintendent assemblies. Elementary school principals questioned superintendents about the principal's responsibilities, about good staff relationships, and about effective classroom practices. This feature was styled after the CBS Person-to-Person program.

The keynote address at the first general session was delivered by Paul G. Hoffman, Managing Director, United Nations Special Fund, New York. At the final general session, Lucile Lindberg, Associate Professor of Education, Queens College, New York, spoke on the "Realities of the Elementary School." After the banquet at the Ambassador Hotel, Frank Graham, United Nations Representative for India and Pakistan, delivered an address on "The United Nations in the Atomic Age."

Other events at the convention included a reception, dance, commercial exhibit of school materials, and sightseeing.

Publications

Yearbook: The DESP's 39th Yearbook, *Those First School Years,* was primarily designed to assist elementary school principals and other educators in planning and administering school programs for youngsters attending kindergarten through grade three.

Throughout the 256 pages of the Yearbook, there is emphasis on the value of knowing what the child is like—how he grows—how he feels—and how he lives.

Magazine: During 1960-61, the magazine modernized its format and introduced color on the inside pages.

Issues which portrayed a specific theme were The Principal's Office, Contemporary Challenges to Elementary Education, Audio-Visual Instruction, the Fortieth Anniversary Issue, and the 1961 Annual Meeting. In the April edition, the magazine varied from a definite theme and carried articles on a number of topics.

In addition, *The National Elementary Principal* displayed articles on the Department and its activities, news of other professional associations, and reviews of important books.

Special Publications: The academically talented pupil has been a subject of much discussion during the last few years. In order to help principals concerned with this area, the DESP and the NEA Project on the Academically Talented Student prepared a handbook entitled *Elementary Education and the Academically Talented Pupil.*

Better Principals for our Schools—A Cooperative Approach to Competence is another handbook prepared by the Department during the year. It brings together the conclusions and insights growing out of the meetings on preparation for the principalship sponsored by the Department, and includes results of study and research by other groups working on leadership improvement in education.

Committee Activities

Seven committees of the Department were helpful in planning and implementing the program during 1960-61. They included: the Executive Committee, Election Committee, Nominating Committee, Editorial Advisory Board, Committee on College and University Relationships, Constitution and Bylaws Committee, and Yearbook Advisory Committee.

Field Services

Now that the Department has expanded its field services, members of the staff and Executive Committee have participated in conferences in some 25 states during the year. They have spoken on aspects of the curriculum, instructional improvement, leadership, salaries, and professional association activities. This increased field activity has been made possible by the recent increase in Department dues.

Preparation for the Principalship Project

As a result of additional funds, the Department has renewed its long-term project to improve the preparation, recruitment, and selection of elementary school principals. A Committee on College and University Relationships has had special responsibility in this area.

Under the Committee's guidance, the publication *Better Principals for our Schools—A Cooperative Approach to Competence* has been written and published. It includes material on recruitment, preparation, and selection of elementary school principals. One of the primary aims of the booklet is to stimulate much discussion throughout the country on these aspects of the principalship.

Summer Conferences

Our 50th state became the scene for the Department's 18th Annual Summer Conference during 1961. The program, which was held at the University of Hawaii, July 5-15, placed special emphasis on East-West relations, and the ways international understanding can be reached in the elementary school.

Several of the fascinating topics touched upon were the History and Culture of Hawaii, American Foreign Policy, The Role of Educational Organizations for Peacemaking, and Dilemmas in World Affairs for the United States.

Cosponsors were the Committee of International Relations, NEA, and the University of Hawaii.

Last summer, the Department, along with the State University College of Education at Plattsburgh and the New York State Association of Elementary School Principals, sponsored the leadership workshop and reading conference in Plattsburgh, New York, August 15-26.

At this conference, the mass media of communication—television, radio, newspapers and books—were explored. During many of the sessions, participants sought ways to apply their understanding of mass media to on-the-job situations.

Outstanding speeches on mass media of communication were rendered by John Furbay, an aviation education consultant; Dan Lacy, Managing Editor of the American Book Publishers; William S. Rubens, Manager of Audience Measurement for NBC; Robert E. Kenyon, Jr., President of the Magazine Publishers Association; and Stanford Smith, General Manager of the American Newspaper Publishers Association.

Cooperative Activities

Each year it has been the policy of the Department to work closely with the NEA and its various units on many projects of importance to elementary school principals. Of great interest this year have been the DESP's participation in the NEA Project on Instruction, support of the NEA's legislative program, and a joint project with four other administrative departments concerned with a reassessment of the individual in the total education process.

Other cooperative activities of the Department have been concerned with organizations outside the NEA whose programs are related to elementary education.

The year also saw the Department sponsoring a special orientation program for newly elected state representatives; distributing monthly packets of material to state presidents and a monthly newsletter to state presidents, state representatives, and state editors; holding a meeting for state presidents and representatives from the Middle Atlantic area; and sponsoring a special one-day meeting for state presidents and representatives and another for large city leaders prior to the 1961 Annual Meeting.

EXECUTIVE COMMITTEE ACTION

The Executive Committee is the Department's governing body, responsible for making all major decisions affecting the organization's program and operation. Committee members are elected by the DESP membership and include the president, president-elect, vice president, and six members-at-large.

During the past year, the Executive Committee met in Washington, D.C., October 1-7, 1960, and in Atlantic City, New Jersey, March 23-24, 1961. Action on major items of business is reported below. The official minutes of the Committee are on file in the headquarters office.

Annual Meetings

That La Verne Strong, Curriculum Consultant, State Department of Education, Hartford, Connecticut, be informed that the Department is not in a position to arrange for the International Reading Association to sponsor a conference during the Department's 1961 Annual Meeting in Atlantic City.

That the Department hold its 1962 Annual Meeting in Detroit as originally planned, providing a satisfactory contract can be arranged with Cobo Hall.

That consideration be given to a study of school facilities and materials together with reports of recent research in education as a possible theme area for the 1962 Annual Meeting. (It was understood that consideration would be given to such matters as school buildings, audio-visual developments, new materials of all kinds, and recent research in education, particularly in the instructional field.)

That the Department hold its 1964 Annual Meeting in Minneapolis, Minnesota, April 17-21, 1964.

That the Department hold its 1965 Annual Meeting in Miami Beach, Florida, pending satisfactory arrangements with the Convention Bureau or one of the leading hotels.

Budget

That Margaret Bishop, DESP Administrative Assistant, prepare a statement clarifying the use of the Department's budget. (The Department works within the framework of a total operating budget rather than according to itemized statements. The budget serves as a guide in determining the total amount of money to be expended within the year.)

That the budget for the fiscal year June 1, 1960, to May 31, 1961, be tentatively approved, subject to minor adjustments. (The October 1960 issue of this magazine carried the budget for 1960-61. A few changes were later made by the Executive Committee at their October 1960 meeting.)

Committees

That the following persons be invited to serve on the Department's Nominating Committee for the January 1962 election of DESP officers: H. Richard Adams, Principal, Wright-Denny School, Charles Town, West Virginia; Julianna Boudreaux, Principal, Robert M. Lusher School, New Orleans, Louisiana; Glen R. Melvey, Principal, Jefferson School, Fargo, North Dakota; Louise Reese, Director, Elementary Education, Central Schools, Massena, New York; Winston L. Scott, Principal, Ninety-fifth Street School, Los Angeles, California. The alternate member of the Committee was Gladys T. Dollins, Principal, John H. Russell Elementary School, Marine Corps Schools, Quantico, Virginia.

That the following persons be recommended to the President to serve on the 1961 Resolutions Committee: Richard G. Hansen, St. Paul, Minnesota, *chairman;* James May, Tulsa, Oklahoma; Lois Carter, Spartanburg, South Carolina; Walter Zebrowski, Palos Verdes Estates, California; and Helen Waide, Alexandria, Virginia.

That the Resolutions Committee for the 1961 Annual Meeting meet not later than Friday morning, March 17.

That the following persons be recommended to the President to serve on a committee to review the Constitution and Bylaws of the Department: Vincent Dodge, Fargo, North Dakota, *chairman;* Ethel Nash, Fredericksburg, Virginia; Leo Miller, Hattiesburg, Mississippi; Lois Chatterley, San Diego, California, Lindsey Keeler, Denver, Colorado.

That Roberta Barnes represent the Department on the Educational Policies Commission, NEA, for a three-year term beginning July 1, 1961, to replace Paul Van Ness, whose term expires at that time.

That the Department's Committee on College and University Relationships be asked to review the manuscript prepared by Harold J. McNally, tentatively entitled "Better Principals Mean Better Schools," and make recommendations for publication.

That Roberta Barnes, President of the Department, and Olive Lowry, Member-at-Large of the Executive Committee, clarify for the Committee on College and University Relationships their responsibilities in accordance with the thinking of the Executive Committee.

Constitution and Bylaws

That the Executive Committee submit the following proposed amendment to the Department's Constitution and Bylaws at the 1961 Business Meeting in Atlantic City on March 22:

Article IV, Section 3, Bylaws—This section now reads: "The life membership fee shall be one hundred dollars ($100). Payment of this fee may be made in full or in deferred payments of ten dollars ($10) or twenty dollars ($20) per year. The certificate and emblem of life membership in the Department shall be issued following initial payment toward life membership." (NOTE: The final sentence of this section was amended to read as printed here in the January 1961 election.) The proposed change would read: "The life membership fee shall be *(20) times the annual fee for membership.* Payment of this fee may be made in full or in deferred payments of *twenty dollars ($20)* per year. The certificate and emblem of life membership in the Department shall be issued following initial payment toward life membership."

Cooperative Activities

That the Executive Committee ask the President of the Department to prepare a statement giving the position of the Executive Committee and its recommendations regarding the joint project of the American Association of School Administrators, Association for Supervision and Curriculum Development, Department of Elementary School Principals, National Association of Secondary School Principals, and the Department of Rural Education, NEA, on "the individual and our educational planning for the future." It was understood that this statement would be presented to the Joint Committee at its December 1960 meeting.

That in the future any joint instructional project which involves more than two NEA departments and anticipates publications and extensive use of personnel and funds be handled through the NEA Project on Instruction.

That a policy statement be prepared to guide the Executive Committee in deciding DESP participation on joint projects with the NEA and other departments.

That the following statement become part of DESP policy:

While our Department is autonomous in many ways, it is also tied to the NEA and its departments in several significant respects—not only in the sense of cooperation for mutual good but also in a deeper sense of being part of a unified whole which is the NEA itself.

We recognize that our first responsibility is to our members and that projects we undertake should serve their needs as elementary school leaders. But we feel that there are opportunities, from time to time, to serve these needs better by joining forces with some other NEA department. In so doing, we do not deny the special interests, competence, and responsibility of either department; we unite for more effective achievement of a common purpose. We subscribe, therefore, to cooperation with the NEA and other departments *within the framework of NEA agencies established for this purpose.*

We feel, however, that the approval of the Executive Committee should be secured before the Department commits itself to any inter-departmental project which involves the use of the Department's name and/or funds. We feel, too, that decisions concerning interdepartmental projects should be based on sound criteria which would include such things as: 1) the value of the project to the membership and, through them, to elementary education; 2) its relative value in terms of the Department's total program; 3) its constructive contribution to overall NEA goals; 4) its feasibility from the standpoint of Department budget and personnel.

That the Department pay $150 for the year 1960-1961 in support of the National Council for Research in Education.

That consideration be given to Department participation in WCOTP (World Confederation of Organizations of the Teaching Profession) meetings in the future, particularly to those following the 1961 meeting in New Delhi, India.

Executive Committee

That the Executive Committee accept Marion Cranmore's letter of resignation as Member-at-Large of the Executive Committee. (Miss Cranmore was chosen President-Elect of the Department in the January 1961 election and assumed her new post on June 1, 1961.)

That Opal Eversole, Principal, Fleming Elementary School, Freeport, Texas, fill the unexpired term of Marion Cranmore as Member-at-Large of the Executive Committee. This term is to expire on May 31, 1963.

Publications

That the Executive Committee approve the recommendation of the Yearbook Committee that the 1962 Yearbook be devoted to research in elementary education.

That the Editorial Advisory Board and Yearbook Advisory Committee consider further the possibility of eliminating the Department's Yearbook and substituting other types of professional material.

That all members of the Department receive as part of their membership privileges a copy of the publication tentatively titled "Children and Science" being prepared jointly by the National Science Teachers Association, NEA, and the DESP. (This booklet will be available during the 1961-1962 membership year.)

That the Department express its appreciation to Fred Tuttle, Director of the Department's 1960 summer conference at Plattsburgh, New York, for making available the conference material on communication for possible use in *The National Elementary Principal* or for other Department projects.

Regional Conferences

That the elementary school principals associations in Kentucky, Michigan, Ohio, Indiana, and Illinois be invited to participate in the regional conference on

preparation for the principalship scheduled for the University of Indiana, December 10-12, 1961.

That if Department services are provided at the meeting of the South Central District Association of Elementary School Principals on preparation for the principalship, to be held in Baton Rouge early in 1962, it should be made known that similar services wlil be offered any district association in that area holding a conference dealing with the same subject.

That the invitation received from Rodney Tillman for the Department to hold a conference on preparation for the principalship at George Peabody College, Nashville, Tennessee, be accepted.

Relations with State Associations

That the Executive Secretary and President of the Department be authorized to plan a regional conference at NEA headquarters at the expense of the Department for state presidents and state representatives from the Middle Atlantic area. It was understood that the conference would include state presidents and representatives from the following states: Delaware, District of Columbia, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, and West Virginia. (This meeting was held in January 1961.)

That the Department hold the usual orientation meeting for new state representatives at NEA headquarters in the fall of 1961.

That the Executive Secretary explore the desirability of expanding the 1961 orientation meeting for new state representatives to include the presidents from those states which have new representatives.

That the Department send a spring billing to as many states as possible for the 1961-62 membership year. (It was understood that such a billing would be arranged after consulting the state representative and state president to secure their support.)

That in the case of a state elementary principals association wishing to solicit DESP dues on a unified states dues plan, the Department follow the same procedure used by the NEA in relation to joint membership solicitation with a state education association.

Staff

That Mary H. Scott, a staff member, be a permanent employee of the DESP. Her title will be Consultant in Elementary Education.

Summer Conferences

That the Department extend an invitation to the NASSP to cosponsor the conference at the University of Wisconsin, July 3-14, 1961.

That the Department sponsor a conference at the UCLA at Los Angeles during the summer of 1962 in accordance with DESP policy. (This action, taken at the October meeting, was reversed in March.)

That due to local workshops and the advice of the California Elementary School Administrators Asso-

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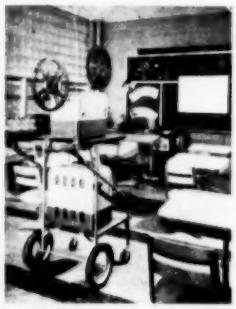

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This model may be locked in stationary position and is well-balanced under heavy loads. Easily maneuvered in narrow corridors or around sharp corners.

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ciation, the 1962 summer conference tentatively scheduled by the Department for UCLA be cancelled.

That the Department accept the invitation from the University of New Mexico to hold a summer conference on its campus immediately following the 1962 NEA convention in Denver.

That the Executive Secretary be authorized to continue explorations with Purdue University as to the possibility of the Department sponsoring a summer conference on the Purdue campus not later than 1963.

That the Department accept the invitation extended by the University of North Carolina to hold a conference there for beginning principals, outlined and conducted according to the wishes of the University, in the summer of 1961 or 1962. It was understood that this conference would be planned and operated in keeping with established DESP policy on summer conferences.

That a careful evaluation be made of the summer conference being planned by the University of North Carolina for beginning principals to help determine the Department's future course on similar regional or national conferences. (It was agreed that study should be given to developing a national center where conferences for beginning principals could be held for a number of successive summers.)

Discussion Topics

A substantial amount of time at Executive Committee meetings is devoted to discussion of matters on which no formal action is taken. Major points of discussion are reported below:

1966 Annual Meeting: It was agreed that consideration should be given to holding the 1966 Annual Meeting in Portland, Oregon.

Field service: The Executive Secretary reported that commitments had been made for members of the staff and the Executive Committee to speak to 25 state and local elementary principals associations during the current year. The Department expects to be able to expand its field services during the 1960-61 school year.

Joint projects: A brief report was made on an invitation to the Department to join with the American Association for School Administrators, NEA, the Association for Supervision and Curriculum Development, NEA, the National Association of Secondary School Principals, NEA, and the Department of Rural Education, NEA, to participate in a study of individual differences in planning for instruction. It is expected this project will involve one more publication besides the leaflet which has been issued.

Kindergarten-Primary Department: Some time was given to a discussion of a proposed change in the name of the Kindergarten-Primary Department of the NEA. Ethel Thompson, NEA liaison officer for this Department, appeared before the Committee to discuss the matter. It was the Executive Committee's opinion that there would be no conflict with the DESP if the Kindergarten-Primary Department changed its name to indicate a broader concern for all elementary education.

Meeting for state presidents and representatives: There was a brief discussion about the program for state representatives and state presidents on Saturday, March 18, in Atlantic City. It was agreed that the agenda should consist of some major problem of interest. It was tentatively decided that at least half the day would be devoted to problems pertaining to the preparation of elementary school principals.

Preparation for the principalship conferences: The Executive Committee agreed that the Department should plan to sponsor a second series of regional conferences on preparation for the principalship similar to those held in 1956-58. These conferences, to be held within the next two or three years, would include all 50 states. It was suggested that participants in these conferences pay particular attention to the questions raised in the publication *Better Principals for Our Schools* as a basis for action. Findings from these conferences are expected to be published in a final report as recommendations to the profession in the areas of preparation, recruitment, pre-service and in-service programs, certification, and selection.

It was suggested that an advisory committee be set up to assist in planning each of these regional conferences on preparation for the principalship and that whenever possible, a member of the Executive Committee serve on each of the advisory committees.

There was a brief discussion about the extent to which the Department should finance these conferences. It was agreed that the funds allotted would at least be equivalent to the amount spent for the first seven conferences, with the possibility of additional funds being appropriated.

Summer conferences: It was brought to the attention of the Executive Committee that an invitation to hold a summer conference had been received from the California Polytechnic Institute at San Luis Obispo.

The Executive Committee requested that the Executive Secretary investigate the possibility of holding future summer conferences outside the United States.

The Executive Committee discussed the possibility of a number of special conferences dealing with international understanding in the elementary school. It was suggested that if money were made available by an outside agency, effort be made to sponsor one or more such summer conferences. Participation would be by invitation only and each conference would be planned to meet a special need. For example, it was suggested that a group of persons from small communities might be brought to New York City for a one- or two-week program to visit various cultural institutions and the United Nations.

Yearbooks: The Executive Committee made the following suggestions for future yearbook topics: 1) international understanding; 2) the science program in the elementary school; 3) the average or normal child; 4) testing; 5) audio-visual materials; and 6) standards of instruction.

BUSINESS MEETING

THE 1961 BUSINESS MEETING of the Department of Elementary School Principals, NEA, held in Atlantic City, New Jersey, March 22, was called to order by President Roberta Barnes.

Mrs. Barnes introduced Washington I. Cleveland, Secretary of the D. C. Division of the American Automobile Association, who served as parliamentarian of the Business Meeting.

It was moved and seconded that the reading of the minutes of the previous Business Meeting be dispensed with. *Motion passed.*

L. Morgan Fitzell, Principal, Hawthorne School, Baltimore, Maryland, presented the report of the Election Committee on the 1961 election of officers as follows:

Elected to office: President-Elect, Marion Cranmore, Ann Arbor, Michigan; *Vice-President,* Orville B. Aftreth, Minneapolis, Minnesota; *Members-at-Large,* Harry Haynes, Lewiston, Idaho; Helen Ferslev, Green Bay, Wisconsin.

The amendment to the Constitution which becomes Article VII and provides for the distribution of the Department's assets in the event of dissolution was passed.

The amendment revising the time at which life members may receive their emblems and certificates was passed.

The amendment to change the procedure for amending the Bylaws was passed.

Robert W. Eaves, Executive Secretary, reported to the Business Meeting on Department activities. Mr. Eaves drew attention to the possibility that the 1962 Annual Meeting might not be held in Detroit owing to managerial problems at Cobo Hall.

Dorothy Neubauer, Assistant Executive Secretary, reported on DESP publications.

Mrs. Barnes introduced Ralph Allen of Madison, Wisconsin, who extended an invitation to all members to attend the summer conference of the Department to be held July 3-14 in Madison, the theme of which would be "World Tensions and Education."

Mrs. Barnes introduced Vincent J. Dodge, Fargo, North Dakota, Chairman of the Constitution and Bylaws Committee, who reported on the work of that Committee.

Mrs. Barnes introduced Robert W. Langerak, Des Moines, Iowa, Chairman of the Committee on College and University Relationships, who reported on the activities of the group.

Mrs. Barnes introduced Richard Hansen, St. Paul, Minnesota, Chairman of the 1961 Resolutions Committee, who presented the report of the Resolutions Committee. Action was taken on the resolutions as follows:

Resolution on Financing Education: It was moved and seconded that this resolution be adopted.

It was moved and seconded that the word "public" be inserted after the word "quality" in the first sentence of the second paragraph.

It was moved and seconded that this resolution be adopted as amended. *Motion passed.*

Resolution on Pressures: It was moved and seconded that this resolution be adopted. *Motion passed.*

General Motions on Resolutions: It was moved and seconded that the resolutions be adopted in their entirety as written. *Motion passed.*

It was moved and seconded that the resolutions be adopted in their entirely as amended. *Motion passed.*

It was moved and seconded that a vote of thanks be offered to the Department's staff and officers. *Motion passed.*

Martin Tate, President-Elect, of Phoenix, Arizona, presented an amendment to the Constitution and Bylaws as follows:

ARTICLE IV, SECTION 3, Bylaws

Present: "The life membership fee shall be one hundred dollars ($100). Payment of this fee may be made in full or in deferred payments of ten dollars ($10) or twenty dollars ($20) per year. The certificate and emblem of life membership in the Department shall be issued following the initial payment toward life membership."

Proposed: "The life membership fee shall be *twenty (20) times the annual fee for membership.* Payment of this fee may be made in full or in deferred payments of *twenty dollars ($20)* per year. The certificate and emblem of life membership in the Department shall be issued following the initial payment toward life membership."

It was moved and seconded that this amendment be authorized for submission to the members with the ballot in January 1962. *Motion passed.*

It was moved and seconded that the Meeting recommend to each state organization that information on candidates for office in the Department be limited to that appearing in *The National Elementary Principal* and to brochures sent out by the Department with the ballots in January. *Motion passed.*

It was recommended that the Executive Committee appoint a committee to study and recommend a new salary schedule for the Executive Secretary and members of the staff.

It was moved and seconded that the recommendation be adopted. *Motion passed.*

There being no further business, the Meeting was adjourned.

How can I convince m[illegible]TA about gym suits?

How often have you wondered and searched for an idea that would *impress* the PTA with the importance of physical education . . .

. . . and the significance of the uniform, girl's gym suit in its role as a training aid?

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Help is here . . . and it's in the form of a "take-home" folder carrying both these vital messages to parents:

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Membership Report

State	June 1961	June 1960	1-Year Change	June 1956	5-Year Change
Alabama	231	247	− 6%	212	9%
Alaska	24	24	None	25	− 4
Arizona	256	334	−23	84	204
Arkansas	129	139	− 7	89	44
California	1857	1927	− 4	1251	48
Colorado	372	363	2	271	37
Connecticut	331	332	−0.3	246	34
Delaware	65	55	18	32	103
District of Columbia	142	122	16	94	51
Florida	664	600	11	404	64
Georgia	392	427	− 8	235	67
Hawaii	85	100	−15	52	63
Idaho	119	135	−12	98	21
Illinois	855	898	− 5	728	17
Indiana	623	655	− 5	471	32
Iowa	318	336	− 5	234	36
Kansas	453	439	3	316	43
Kentucky	266	273	− 3	162	64
Louisiana	290	273	6	257	13
Maine	67	75	−11	54	24
Maryland	417	440	− 5	371	12
Massachusetts	408	397	3	276	48
Michigan	1120	1052	6	546	105
Minnesota	434	459	− 5	359	21
Mississippi	165	159	4	138	20
Missouri	467	569	−18	278	7
Montana	124	119	4	115	8
Nebraska	184	180	2	135	36
Nevada	87	78	12	10	770
New Hampshire	55	58	− 5	51	8
New Jersey	703	633	11	390	80
New Mexico	177	186	− 5	164	8
New York	895	871	3	647	38
North Carolina	358	365	− 2	325	10
North Dakota	87	76	14	46	89
Ohio	1232	1219	1	875	41
Oklahoma	279	311	−10	237	18
Oregon	381	409	− 7	388	− 2
Pennsylvania	758	797	− 5	647	17
Rhode Island	72	38	89	35	105
South Carolina	177	192	− 8	180	− 2
South Dakota	96	91	5	72	33
Tennessee	400	368	9	384	4
Texas	780	838	− 7	688	13
Utah	206	215	− 4	145	42
Vermont	41	45	− 9	36	14
Virginia	373	357	4	317	18
Washington	316	329	− 4	227	39
West Virginia	251	332	−24	342	−27
Wisconsin	470	511	− 8	416	13
Wyoming	66	59	12	39	69
Puerto Rico	14	10	40	10	40
Foreign	251	172	46	162	55
Total	**19,383**	**19,689**	**− 2%**	**14,366**	**4%**

FINANCIAL STATEMENT

Fiscal Year Ending May 31, 1961

PERMANENT FUND			
Balance May 31, 1960		$ 49,901.08	
Interest on investments	$ 1,476.77		
Received on life membership	7,763.50	9,240.27	
BALANCE MAY 31, 1961			$59,141.35
EMERGENCY SAVINGS FUND			
Balance May 31, 1960		10,039.61	
Interest on investments		407.63	
BALANCE MAY 31, 1961			10,447.24
CURRENT FUND			
Income			
Memberships		144,539.65	
Sale of publications		43,821.53	
Advertising		17,796.03	
Convention registration fees and banquet		24,156.10	
Exhibit space		38,700.00	
Use of mailing plates		287.60	
Interest		1,251.06	
Total income			$270,551.97
Expenditures			
Committees		10,260.96	
Conventions and conferences		43,043.31	
Field service		3,090.35	
Orientation meeting for state representatives		2,333.53	
Programs involving cooperation with NEA and other groups		1,418.99	
Election of officers		1,651.75	
Publications and other printing		61,602.80	
Administrative and general expenses			
Salaries and pensions	88,161.52		
Insurance, pensions, social security, hospitalization	11,303.60		
Office supplies	4,969.00		
Telephone and telegraph	981.85		
Postage and express	9,110.22		
Accounting fee	200.00		
Promotion of membership and publications	3,909.42		
Miscellaneous	5,479.08	124,114.69	
Total expenditures			$247,516.38
Excess of income over expenditures before capital expenditures			23,035.59
Less capital expenditures—Office equipment			2,640.37
Excess of income over expenditures			20,395.22
Balance June 1, 1960			42,469.51
BALANCE MAY 31, 1961			$62,864.73

Verified by Richard R. Lyle, Public Accountant
Washington, D. C.

BUDGET

Fiscal Year June 1, 1961, to May 31, 1962

INCOME		
Membership (based on estimated 19,100 regular memberships, not including life memberships)	$152,800	
Sale of publications	40,000	
Advertising in NEP and Annual Meeting program	18,000	
Convention registration and meal functions	28,000	
Exhibits	37,500	
Miscellaneous	1,600	
		$277,900
EXPENDITURES		
Committees:		
Yearbook Advisory Committee	$ 1,500	
Editorial Advisory Board	1,200	
Executive Committee	4,500	
Committee on College and University Relationships	1,500	
Committee on Constitution and Bylaws	1,200	
Miscellaneous Committees (including meetings with people on joint projects, special meal functions for groups meeting at headquarters)	1,200	
Annual Meeting (including exhibit expenses, auditorium rental, travel, printing, extra clerical help, etc.)	40,500	
Special conferences (including expenses for summer meetings and conferences on preparation for the principalship)	5,000	
Field services (including trips by officers to help professional groups; trips by president and staff)	4,500	
Orientation meeting for new representatives	2,800	
Program involving cooperative action with NEA and other groups	2,000	
Membership promotion	4,200	
Election of officers, Nominating Committee	1,500	
Publications (yearbook, magazine, and miscellaneous)	65,000	
NEA services	4,500	
Salaries	102,500	
Retirement, pension, group hospitalization, social security	12,000	
Office supplies, repair of equipment	6,000	
Office equipment	3,000	
Postage, Railway Express (including postage for office and meter machine for bulk mailings)	10,600	
Telephone and telegraph	1,200	
Professional library	300	
Miscellaneous	1,200	
		$277,900

RESOLUTIONS

The following resolutions were officially adopted at the 1961 Business Meeting of the Department of Elementary School Principals, NEA, held in Atlantic City, New Jersey March 22.

Preamble

The Department of Elementary School Principals, NEA, pledges the allegiance of its membership to the American democratic way of life and the esteem which it accords the individual. The Department firmly believes that a sound educational program is indispensable to the protection and strengthening of this fundamental concept. The security of this nation demands education of all children, that they may be prepared for the duties of citizenship and qualified to accept its opportunities and responsibilities. The Department holds that free public schools offer the greatest assurance for the attainment of national strength and the preservation of our American ideal of individual freedom.

The Department reaffirms its respect for the dignity and worth of every individual and maintains that the purpose of the public schools is to provide for the optimum personal development of all. It is the conviction of this organization that the basic skills of learning are fundamental to the education of all children. But more than the basic essentials are necessary to national survival. Provision must be made for improving all aspects of human development. The growth of desirable social traits requires attention. Esthetic, moral, and spiritual values need to be strengthened. Creative talents must be nurtured. Critical thinking must be fostered. Economic and vocational education should be provided. We, as elementary school principals, are pledged to assist in the provision of an educational program that will challenge all youngsters to develop the full extent of their abilities and aptitudes.

The members of the Department of Elementary School Principals, NEA, are convinced that the elementary school has a distinctive role in the education of the American citizenry. The unique characteristics of this institution demand that any changes in its practices give respect to the population it serves and the purposes for which it has been designed.

We feel assured that the citizens of this country desire and will provide the finest education attainable if they are fully apprised of the goals to be achieved.

To seek these ends, we resolve:

Financing Education

The Department of Elementary School Principals, NEA, believes that the principle of public education for all becomes a hollow mockery if children must go to school part time, be housed in unsatisfactory buildings, or be taught by persons not fully qualified for the job.

The cost of providing quality public education is a financial responsibility which must be shared by all levels of government—local, state, and federal. Recognizing the historic role of the federal government in the advancement of public education, the Department of Elementary School Principals, NEA, strongly endorses the principles of federal support set forth in the Morse-Thompson bill (S. 1021 and HR. 4970) and urges immediate enactment of this legislation by Congress.

Pressures

The Department of Elementary School Principals, NEA, is concerned about the current pressures placed upon the elementary school. Some of these pressures have led to worthwhile changes and adjustments. However, proposed changes should be studied carefully to determine their effect upon the lives of young children. This study should give consideration to the social and emotional as well as the academic and intellectual consequences.

Teachers

The Department of Elementary School Principals, NEA, recognizes the teacher as the foremost influence upon the school life of the child. A teacher worthy of this great responsibility must be placed in every elementary school classroom.

Nowhere is the shortage of competent teachers more critical than in the elementary school. To procure qualified teachers is no easy task, but this is a problem so grave that the Department urges educators to exert every effort to bring about a solution.

Supervising Principals

The Department of Elementary School Principals, NEA, urges that there be a competent and professionally prepared principal in every elementary school who is freed from teaching duties that he may devote full time to administrative and supervisory responsibilities.

Preparation

The Department of Elementary School Principals, NEA, believes that there is a direct relationship between the quality of the elementary school program and the leadership provided by the principal.

The expanding role of the principal demands a

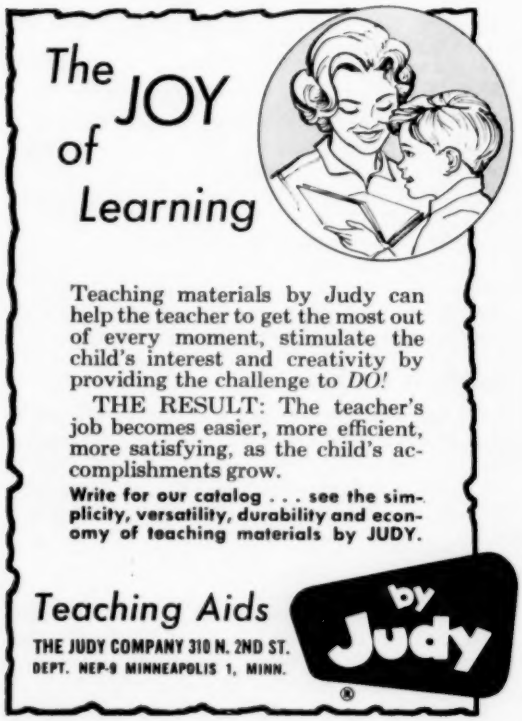
high level of preparation and continuing growth. The Department commends the active interest and efforts which local, state, and national leadership has given to strengthening the competence of elementary school principals. It recommends that such efforts be broadened.

The Department of Elementary School Principals, NEA, strongly supports the efforts of those preparing institutions which are experimenting with improved procedures for developing leadership. Working cooperatively with members of our profession, these institutions are urged to continue research and establish programs best suited to the development of superior elementary school principals.

International Understanding

The Department of Elementary School Principals, NEA, recognizes the need for understanding of peoples at home and abroad and for intelligent leadership in international matters. The elementary school must examine its instruction for ways in which it can broaden horizons and deepen insights into global problems.

A clear understanding of foreign affairs by principals and teachers is basic to the development of such instruction. We, therefore, urge that each principal take the initiative to increase his own competency in this area. It is recommended that the Department continue to offer its members an opportunity to participate in activities that deal with problems of world-wide dimensions.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Kindergarten

The Department of Elementary School Principals, NEA, believes that the kindergarten is essential to the instructional program of the elementary school. This experience helps the young child gain in social maturity and provides learning activities which will facilitate intellectual and academic growth.

Many current practices and proposals suggest a reorganization of the kindergarten curriculum. Some of the procedures being advocated may do more harm than good. While the Department encourages continuing evaluation of the kindergarten program, it insists that any revisions that are made must take into consideration the unique purpose and function of education at this level.

Testing

The Department of Elementary School Principals, NEA, recognizes the increasing use of standardized tests. The utilization of tests prepared by outside agencies has value, but such tests cannot be used without regard for their effect on the individual learner or what the teacher should teach. Tests must serve, not control, the educational program.

Competitive Sports

The Department of Elementary School Principals, NEA, believes that physical education experiences will help children develop essential physical, emotional, and social skills and attitudes. These experiences should be appropriate to the capacities and needs of elementary school pupils.

There is an increasing tendency to force children into varsity sport patterns of competition not in keeping with their readiness and rate of development. The Department believes that children should not be pressured into competitive activities more appropriate for youth of secondary school and college age.

Student Teacher

The Department of Elementary School Principals, NEA, recognizes the mutual responsibility of teacher education institutions and the public schools in the development of an effective student teacher program. We strongly recommend joint study by college and public school personnel in planning such programs.

Appreciation

The Department of Elementary School Principals, NEA, expresses its appreciation to those who have helped plan and implement this Annual Meeting. Many individuals and organizations have supported the association's efforts to provide a conference which will strengthen the professional competence of principals. The members of the Department commend those responsible for their creative leadership in developing the 1961 Annual Meeting.

NEWS...

LOCAL - STATE - NATIONAL

STATE AND LOCAL

A Duty-Free Lunch Time

There are coffee breaks in government as well as non-governmental offices throughout the United States. Let's also give the teachers a break from their instructional, clerical, and disciplinary responsibilities.

With this in view, the California Teachers Association recommended a 30-minute duty-free lunch period for all teachers. This recommendation was then enacted into law (Education Code 13236).

The 68-page publication *The Duty-Free Noon Time as Viewed by the Principal,* prepared by the California Elementary School Administrators Association, discusses and evaluates the duty-free noon time as it is handled in some of the California schools.

Already the practice has been successful, and as one principal so aptly said, it's "one of the nicest things to happen to teachers since the discovery of the apple."

All those interested in seeing how the system works can write for the publication at the National Press, Palo Alto, California. Price: $2.

Adopted Resolutions at Nebraska's Meeting

At the annual meeting of the Nebraska Department of Elementary School Principals in April, there were several resolutions adopted.

Two of these resolutions of special interest are as follows:

- Be it resolved that the Department of Elementary School Principals propose to work with the Nebraska School Boards Association and the Nebraska Association of School Administrators to the extent that every elementary school in Nebraska having at least one teacher per grade level should have a qualified elementary principal. This principal should be freed from part or full-time teaching responsibility to strengthen and enhance the administration in line with national policy and supervision of instruction.
- Be it resolved that all new members of the Nebraska Department of Elementary School Principals be required to have a Master's Degree (the effective date being 1965). Principals belonging before the effective date could continue without a Master's Degree but from that date forward would need such a degree.

A Change in MESPA'S Constitution

In order to provide higher professional requirements for membership in the Massachusetts Elementary School Principals Association, the state's Editorial Board proposed a change in the MESPA constitution which will become effective May 1, 1962. Under the new provision:

"Any elementary school principal, supervising, teaching, or assistant, shall be eligible for ACTIVE membership provided that he has:

"1. Had a minimum of three years of actual classroom teaching experience, two of which have been on the elementary level

"2. Received a master's degree from an institution accredited by A.A.S.S.C. or other appro-

priate certifying association

"3. Made application, been recommended by his superintendent, and sponsored by one active member of the Association on forms supplied and approved by the Board of Directors of the Association

"4. Fulfilled state certification requirements (certificate itself not required)."

Principals who do not fulfill these requirements will be allowed a three-year period as associate members to complete them.

A Survey—The Entrance Age for Kindergarten

A child's first year in school is a momentous time in his life. Why is it so significant?

It is significant because it's one of the child's first opportunities to learn to work in groups; it's a time when he needs a chance to develop ideas; and it's a time when he's grasping for security links beyond family ties.

That is why it's vitally important that schools and parents take into consideration the desirable age for children to start to kindergarten. This problem is of great concern to all in the education field.

In reference to desirable kindergarten age, a Study Committee of the Rochester Elementary Principals Association in Rochester, Minnesota, prepared a recent survey entitled *Report of Kindergarten Entrance-Age Study*. This stimulating publication contains summaries of reports on entrance age policies from schools in Colorado and Minnesota. It also reveals some of the factors that schools and parents must evaluate such as the maturity of a child; whether the kindergarten program is a flexible one; the fact that girls tend to mature more rapidly than boys; and whether overage boys and girls make better school progress than underage boys and girls. The survey refers to books, magazines, and bulletins devoted to the topic and then presents a final analysis.

There are five conclusions, according to the publication, which are as follows: 1) Some children can achieve satisfactorily if admitted early. 2) Multiple criteria are necessary for identification. 3) An early admission policy would require special psychological and social services. 4) The school program is a major determinant as to whether or not children can enter school profitably at a given age. 5) In Minnesota and nationally, there is a definite trend to advance the entrance age for kindergarten, resulting in children being older when they commence school.

For your copy of this informative publication, send 25 cents to Freeman E. Smith, Principal, Edison Elementary School, Rochester, Minnesota.

NATIONAL DEPARTMENT

1962 DESP Election at Hand

September is the month designated for the Nominating Committee to select candidates for the 1962 DESP election. Recommendations of persons to be considered as candidates have been sent in by state and local elementary school principals associations and by individual members of the Department.

Our November issue will present biographical information and photos of the candidates.

Orienting New State Representatives

The DESP will welcome newly elected state representatives to the Department at the orientation meeting on September 16 and 17. The meeting, planned for the occasion, will give 15 state

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representatives a chance to learn more about the operation of the Department and about their responsibilities as liaison persons between the state associations and the national organization.

The EPC Announces Appointments

Roberta S. Barnes, former President of the Department of Elementary School Principals, has recently been appointed to the Educational Policies Commission. Mrs. Barnes, Principal of Lafayette Elementary School, Washington, D. C., is representing the Department in this unique and vital group in American education.

Other appointments include James B. Conant, New York City, President Emeritus, Harvard University; Wendell Godwin, Superintendent of Schools, Topeka, Kansas; and Margaret Lindsey, Professor of Education, Teachers College, Columbia University, New York City.

Constitution and Bylaws Committee Meets

The Committee reviewing the DESP Constitution and Bylaws met at the NEA building in Washington, August 2 and 3.

A major objective of the meeting was to make plans for a questionnaire which will be sent out to sample opinions of the Department's members in regard to the Constitution and Bylaws. The Committee discussed the areas to be covered in the questionnaire, the sampling to which it would be sent, and drafted some of the questions.

Chairman of the committee is Vincent J. Dodge, Principal, Roosevelt School, Fargo, North Dakota. Other members of the committee are Lois M. Chatterley, Principal, Grant Elementary School, San Diego, California; Lindsey D. Keeler, Principal, Ralph S. Pitts School, Denver, Colorado; Leo R. Miller, Head, Elementary Education, Mississippi Southern College, Hattiesburg, Mississippi; and Ethel H. Nash, Principal, Lafayette School, Fredericksburg, Virginia.

A Sketch of the 1962 Annual Meeting

Cobo Hall in Detroit, Michigan, will serve as the site of this year's DESP Annual Meeting, scheduled for March 24-28. Meeting in a new convention hall and having the stimulating theme "Guidelines for Excellence in Elementary Education," the event should encourage a record crowd.

The Department as usual is securing some excellent speakers. Those who have already ac-

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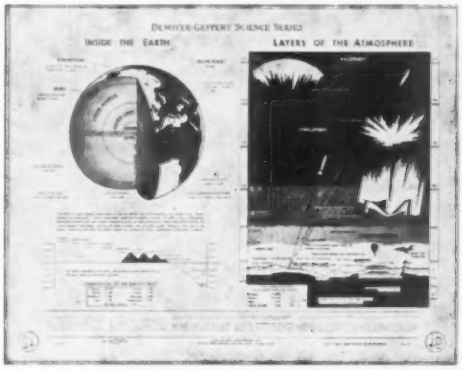

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cepted are Dorothy M. Fraser, Professor of Education at the Colleges of the City of New York, and Jacob W. Getzels, Professor of Education at the University of Chicago, who is currently at the Center for Advanced Study in the Behavioral Sciences, Stanford, California.

Dr. Fraser will be discussing the topic *Procedure for the Selection and Placement of Learning Content and Experiences for the Elementary School Program,* and Dr. Getzels will talk on the subject *Fostering Creativity in the Elementary School.*

More details of the program will be presented in future issues of the magazine. Pre-registration forms and hotel applications will be sent to all members in the late fall.

DESP Consultant

Once again, the professional services of Harold J. McNally, Professor of Education, Teachers College, Columbia University, New York City, will be utilized in the DESP. Dr. McNally will work on a quarter-time basis for the current school year.

He will be engaged in all aspects of the Department's program, and will serve as an invaluable aid towards continuing the efforts of the Department to strengthen the elementary school principalship.

Workshop for New Elementary Principals

During the summer of 1962, the Department and the University of North Carolina will co-sponsor a regional workshop for new elementary principals. The DESP and the University at Chapel Hill are working together on details of the conference.

Wisconsin Summer Conference

With a timely theme, "World Tensions and Education," the DESP's Nineteenth Annual Summer Conference, co-sponsored by the National Association of Secondary School Principals, NEA, and the University of Wisconsin Summer Sessions and School of Education, began on July 3 at the University of Wisconsin in Madison for an 11-day session.

Such outstanding topics as Economic Development, Legal Basis of International Order, Communications, and Human Tensions were highlights of the conference.

IN VIEW OF CURRICULUM THEORY

The principal, bewildered by the multitudinous and often conflicting demands of the public for fundamental changes in what the school teaches, is hard put to decide in which direction to turn for help. He is being importuned to introduce foreign languages in the elementary school, to increase emphasis upon science and mathematics, to cut out the "fads and frills" in favor of the "hard" subjects, to tighten up on discipline, to experiment with team teaching and teaching machines; but most of all, he is asked to gear the program to the contemporary needs of modern America.

Which of these current trends should he follow? How is he to know what is a solid gain in educational progress and how much is a passing fancy? As the educational leader of his school, his teachers look to him for guidance. If he is to measure up to the high expectations, he will need to engage in some serious study of the problem. Unfortunately, no one seems to be in a good position to give him the precise answers he needs. There are many counsels of salvation, but most of them represent some one individual's conception of what is desirable.

This is precisely what is wrong with public school teaching and the curriculum which guides it. We all start with some value system that sets the stage for all we do thereafter. We are exhorted to "teach for democracy," or to meet the emerging needs of society. While these are worthy goals in many minds, they are nevertheless value judgments which determine what we think is right and proper. More importantly, they establish goals for the school which are too broad and pervasive, making school teaching an overchallenging job which staggers the imagination and overextends the competencies of teachers. Some time, and in the not too distant future, a herculean effort will have to be made to reduce the public school task by limiting its total responsibility to some manageable size. If this is to be accomplished, it will call for the development of curriculum *theory* as a guide to practice. If we persist in our present efforts to please all comers, it is predictable that we shall all end up in the proverbial booby-hatch.

Fortunately, new books are beginning to roll off the presses which seek to aid us in the task of making better sense out of our educational programs. Three of them currently reviewed approach the problem from somewhat different perspectives, all three forming a sort of progression from the purely theoretical to the frankly pragmatic.

Curriculum Theory. George A. Beauchamp. Wilmette, Illinois: The Kagg Press, 1961. 149 p. $2.95.

Dr. Beauchamp's basic concern is with the fact that curriculum programs have literally grown up like Topsy, without benefit of any systematic guidance. Practice has largely followed styles and current enthusiasms. We would like to think of education as a science, but it fails to meet the conditions and procedures of a mature science. An exhaustive examination of the literature in the field leaves one with the feeling that, aside from tradition, which has played a major role in determining what the school shall teach, almost anything goes as legitimate content. If school programs are to be based on something more than whim or tradition, they will need to develop a theoretical foundation. This is the task to which the author addresses himself.

It is important at the outset to reassure the practicing principal that theory is not something firmly established on Cloud Nine, but grows out of and becomes an integral part of practice. In fact, one of the authorities quoted by Dr. Beauchamp gives the simple definition of theory as "the ordering of facts." It is a false dichotomy to think of theory and practice as separate and unrelated. Theories are derived from experience, and after their formulation, are used as a means of giving further direction to experience.

Dr. Beauchamp's little book is an important contribution to giving clarity to a badly muddled

field. His chapter on "Theory Building" should help materially to make the issue clearer, although certainly it will not make it any easier. He identifies five basic tasks to be performed in the construction of a theory: definition of terms, a classification scheme, stating inferences or hypotheses, making predictions, and forming sub-theories.

Turning to curriculum theory as an illustration of theory building, he identifies five tasks to be performed. (1) It is necessary that there be a clear definition of what we mean by curriculum. That this is not an easy task is illustrated by the many variations one finds in the literature as to what it is we are talking about. (2) Curriculum objectives then need to be stated as simply as possible, since the objectives determine what we are attempting to do. (3) This, in turn, helps us to select appropriate content which will help us reach the objectives. (4) This content must then be organized into appropriate and manageable teaching units. (5) And, finally, to give some ordered sense to the mass of material which one will inevitably find in any curriculum, a basic design for the whole program must be devised.

As an illustration of what he is talking about, Dr. Beauchamp proposes a curriculum model, not as the perfect answer to "the" curriculum, but as a means of demonstrating the various aspects involved in building any curriculum. Inevitably, the curriculum model represents the author's own conviction and point of view, but he carefully warns against its acceptance as final.

As one approaches the task of developing a defensible curriculum, one is likely to be alarmed by the awesome task and its complexity. But this initial reaction should not deter the professional educator who is disturbed by the present state of affairs and feels that our children deserve something better than this. However difficult it is, our efforts should be diverted from the "scissors and paste-pot" method, and directed toward the construction and evolution of school programs which will begin to mark education as a maturing profession. Dr. Beauchamp has made a signal contribution to this end.

Elementary School Curriculum: Theory and Research. Aubrey Haan. Boston: Allyn and Bacon, 1961. 363 p.

Unlike Dr. Beauchamp's book, Dr. Haan has taken a "value" position in the development of his curriculum. He begins with the perfectly reasonable hypothesis that since school programs are for the development of boys and girls, a curriculum should be based on the facts of individual growth. Like Dr. Beauchamp, however, he states his theory of individual growth in 55 assumptions which go to make up his theory of personality growth. These are then augmented in the succeeding four chapters with the data which supports his assumptions. As he states in the Preface, many readers will want to read the supporting data first, then check it against the assumptions.

One of the most important chapters for elementary school principals is Chapter IV, "How Curriculum Varies with the Neighborhood." Since the author takes the position that all curricula must, at some point, be adapted to the individual school, it becomes particularly important that the local community be studied. Such questions as the class structure and its effects on children and teachers, the local school culture as it is modified by the community, and the particular needs of the local community become important considerations in planning the school program.

Part II, "Experimenting and Evaluating," is not recommended for those who seek initial instruction in these fields. My personal feeling in reading this section was that the introduction to educational research and evaluation as given would be more likely to dissuade principals from engaging in any such activity. This section would aid only those who want some simpler methods than those learned in graduate schools.

Part III of the volume attempts to give some of the growing edges in the subject areas of science, social studies, methematics, language arts, art, music, and physical education. Necessarily, this treatment would need to be inadequate when compressed into some 80 pages.

In Part IV, "Problems of Curriculum Development," Chapters 13 and 14 give helpful advice for the organization of curriculum and its relation to school organization. Emphasizing George Sharp's notion that curriculum change involves the re-education of teachers, the author suggests ways of helping the teacher make the adjustments required, albeit very sketchily. Chapter 13's greatest claim to fame is in the practical suggestions offered for the development of curriculum at the local building level. Again, in Chapter 14, a capsulized treatment of such matters as school and

class size, grouping, and special classes is offered. The last two chapters discuss briefly the role of the lay public and curriculum specialists in developing school programs.

In general, it might be said that Dr. Haan has constructed a volume which ranges widely over the conventional areas of curriculum concern, giving the reader a kaleidoscopic view of many areas of importance, but treating none with any degree of thoroughness. The book's main value lies in the care with which the author has tried to relate all aspects of curriculum to his theory of personality growth. As such, it represents a model which principals might wish to see followed, provided the principal accepts the author's major premise that curriculum is primarily for the development of human personality. One who chooses some other basic assumption as a basis for a concept of curriculum might find some areas of disagreement.

The Teacher in Curriculum Making. Joseph Leese, Kenneth Frasure, and Mauritz Johnson, Jr. New York: Harper and Brothers, 1961. 497 p.

Dr. Beauchamp's book attempted to define and illustrate the necessary conditions and processes involved in the formulation of *any* theory of curriculum, while Dr. Haan's book explicated a specific theory in all its ramifications. So far as I could determine, the above book took no theoretical position, but concentrated on the process of teaching as it affects the major instrument for its implementation—the teacher. As reviewed, the three books, therefore, present an interesting variation in the many approaches which may be made to the same subject. This variation probably explains why we are having so much difficulty in gaining any clarity with regard to what really is a curriculum.

The authors take a frankly realistic approach to the problem. Without taking any particular position, they are interested in helping the harried principal to become more effective in getting any curriculum to work better. Since current theory proposes an increasingly large place be given teachers in the construction of curriculum and, further, since teachers feel both strange and uneasy with this added professional responsibility, the authors focus on *teacher* problems. They freely admit that curriculum is a vast field, that teachers need sympathy and understanding as they attempt to make a professional contribution; therefore, all attempts to involve them should be made gently. The first chapter attends to this problem of orientation, the authors giving sound advice regarding how this may be accomplished.

Principals will find Chapter III, "The Teacher as Key Factor," especially helpful in planning for curriculum change. The authors take a jaundiced view of teachers' present capacity to engage in curriculum revision. They frankly admit that the making of long lists of objectives rarely influences teacher behavior. While the content taught is largely determined by the teacher, he is likely to make his selection by the choice of textbooks. Teachers are not wildly enthusiastic about curriculum planning and need a considerable amount of insight and incentive from their educational leader. While the authors insist that curriculum development is essentially a cooperative process, they willingly admit that teachers lack the skills necessary for successful cooperative endeavor, and thus need much leadership in learning how.

After admitting a rather dismal state of affairs, the authors then proceed to offer considerable sound advice on how to meet the challenge. Part II, "Providing the Bases for Revisions," is devoted to considerations of ways to bring about change, particularly in overcoming the natural resistances teachers inevitably set up. Part III will be found to be a more conventional treatment of planning resource and learning units, using instructional materials, and the improvement of extra-class activities, all with a continued focus on teacher problems.

If the reader skipped all other parts, the book would be well worth a careful perusal of the material in Part IV, "Working with Others for Improvement." It is in this section that the principal will find many helpful suggestions for organizing for curriculum change and the cooperative procedures involved. Chapter 13 is concerned with the necessity for teachers to understand the dynamics of community organization, the development of local initiative so that the curriculum becomes the consensus of the building staff, and the role leadership must play in the process. Chapter 14 will give the principal a handy guide in helping teachers to learn to work together.

If I were to take issue with any of the authors' point of view, it would be in relation to their conception of community participation in the process

of curriculum construction. Although they carefully state that the public has only a limited role to play, they tend to spell out that role to the point that it covers all essential areas, such as helping to diagnose community needs, helping to develop broad goals and objectives, assisting in explaining learning and teaching (?), studying children, planning and carrying on instruction, and cooperating in evaluation. It would be difficult to find any areas not open to public participation the authors have ignored, except the technical aspects of the teaching act itself. While I would insist with the authors that we can go too far in making public school teaching a private enterprise, it would seem that they have gone too far in the direction of making it a "fish-bowl" operation.

The concluding chapter, 16, should contribute materially to allaying fears about "The Teacher and Curriculum Research." Simple methods available and usable by all teachers are discussed, with a section on what teachers can do about classroom experimentation.

As one reads this comprehensive treatment of curriculum problems and practices, it is difficult to escape the conclusion that curriculum change is a formidable task, and not one to be entered lightly or naively. Principals, who are rapidly becoming the chief educational officer for curriculum development, need to be sobered by the magnitude of the task. The volume under review will help them to understand better the ramifications involved.

If any major criticism of the book were to be offered, it would relate to the technical aspects of the organization of material. Chapters are excessively chopped up into little sections, inevitably leading to redundancy and repetition. However, this should not detract from the fact that there is much meat here for the conscientious principal, particularly in Part IV. Much of the book could be ignored by the sophisticated practitioner. To him, the volume would be basically useful as a resource for help on pertinent problems.

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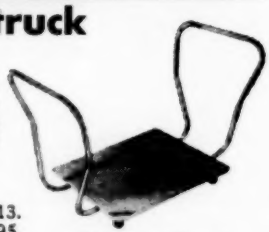

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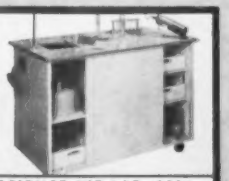

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October 29-November 10: Seventh Annual Management Work Conference. Harriman, New York.

November 9-11: Ninth Annual Conference, National Association of Public School Adult Educators, NEA. Washington, D. C. Theme—Meeting the Challenge of Change.

November 15-18: Regional Conference, Council for Exceptional Children, NEA. Seattle, Washington.

November 22-25: Annual Meeting, National Council for the Social Studies, NEA. Chicago, Illinois.

November 29-December 2: Regional Conference, Council for Exceptional Children, NEA. Austin, Texas.

March 24-28: Annual Meeting, Department of Elementary School Principals, NEA. Detroit, Michigan.

March 30-April 3, 1963: Annual Meeting, Department of Elementary School Principals, NEA. Oklahoma City, Oklahoma.

April 18-22, 1964: Annual Meeting, Department of Elementary School Principals, NEA. Minneapolis, Minnesota.

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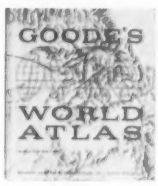

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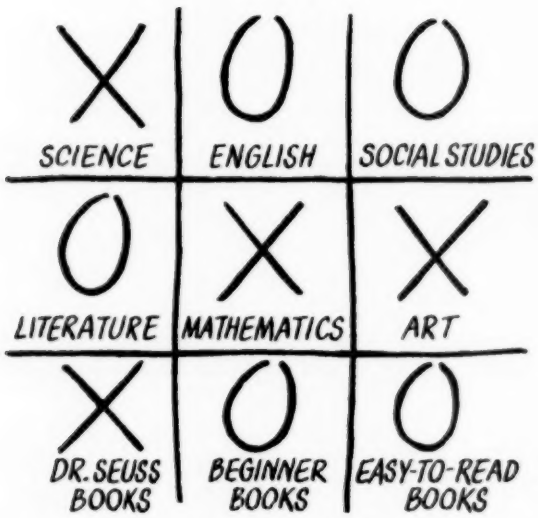

Whether it's "X's" or "O's" is unimportant.

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